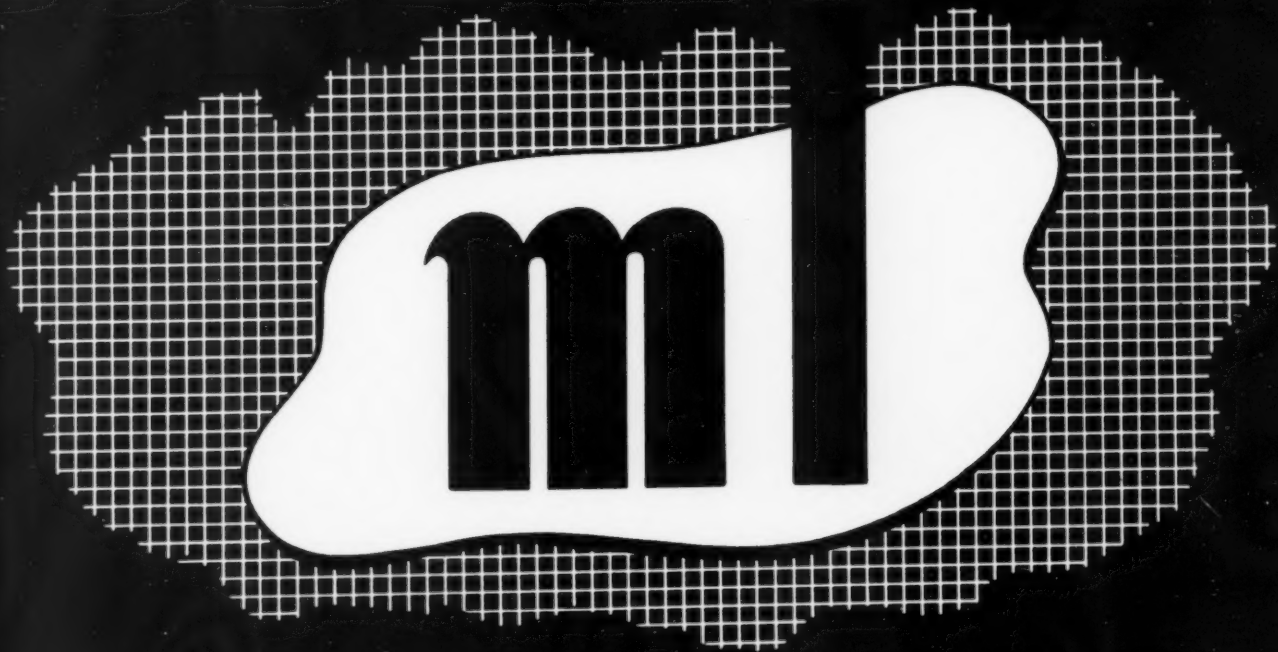


MODERN



LITHOGRAPHY



Permanent Process Blue 629P

Senelith Inks

were the first lithographic inks
made from dyestuffs
treated with sodium tungstate
for better sunfastness
and are still leading
with their outstanding resistance properties

The Senefelder Company, Inc.

"Everything for Lithography"

32-34 Greene Street

New York, N. Y.

TRADITIONALLY PREFERRED FOR PRECISION PRINTING PRODUCTION



VICTORY War Quality PAPERS

Northwest Pedigreed Printing and Utility Papers continue to provide all their traditional production and performance qualities even though in observance of urgent war needs their brightness is slightly reduced. Paper users can patriotically use more printing, and should where its employment serves to keep the wheels of Business turning, or strengthens public morale thus aiding the war program.

THE NORTHWEST PAPER COMPANY • CLOQUET, MINNESOTA, U. S. A.

Copyright 1942 By The Northwest Paper Company



GREETING CARD
PAPETERIE

Embossed and decorated

Save money by
Shipping via
Miami Valley
Shippers' Assn.



BUY WAR STAMPS!
BUY WAR BONDS!

When you push

ADENA HALFTONE OFFSET

you're "talking turkey!"

Adena Halftone Offset has the uncanny ability to help put over the selling message just a little better than anything else you've ever used. So . . . recommend it for that next important job and win the gratitude of your customer.

Humidified during manufacture, treated to moisture-proof packing, delivered to printer absolutely flat . . . ready to run. Won't shrink, stretch, strain or curl.

*Dull or gloss . . . midway between enamel
and regular offset . . . no mottling or muddy effects.*

CHILlicOTHE PAPERS

A BUY-WORD
FOR HIGH-GRADE

THE CHILlicOTHE PAPER CO.
Chillicothe, Ohio



MAKERS OF QUALITY OFFSET, LITHOGRAPH AND BOOK PAPERS

MODERN LITHOGRAPHY

PUBLISHED IN THE INTERESTS OF LITHOGRAPHERS EVERYWHERE



THE COVER

Miss Margaret Poole typifies the trend in the litho trade toward placing women in shop jobs when men are not available. She operates the camera, shown here, at Dando-Schaff, Philadelphia. She formerly worked in a commercial studio. (See "Lady Lithographers," page 18.)

November, 1942
Volume 10, No. 11

MUCH TALK BUT FEW FACTS HAVE flown about the trade on the essentiality of the litho industry in the eyes of WPB. During the past month a committee of industry representatives met in Washington to try to get at the facts. Story of this and WPB's thinking on general industry concentration starts on page 31.

TIED UP CLOSELY WITH THE FUTURE of the industry is the problem of metals and paper. This whole subject is brought up to date including the story behind the recent newspaper story on mandatory use of paper litho plates. (Page 29.)



Editor-In-Chief
WAYNE E. DORLAND

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Associate Editor
ROBERT P. LONG

Advertising Manager
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MODERN LITHOGRAPHY

Reg. U. S. Pat. Office

GRANT A. DORLAND, President; IRA P. MACNAIR, Vice-President; WAYNE E. DORLAND, Secretary-Treasurer. Published monthly on the 15th by The Photo-Lithographer, Inc., Publication Office, 1309 Noble St., Philadelphia, Pa. Advertising and Editorial Office, 254 W. 31st St., New York, N. Y. ADVERTISING RATES: Advertising rates made known on application. Closing date for copy—20th of the month previous to date of issue. SUBSCRIPTION RATES: \$3.00 per year in the United States, \$4.00 per year in Canada. Single copies, 30 cents. Entered as second class matter at the Post Office at Philadelphia, Pa., under the Act of March 3, 1879.

NOVEMBER 1942

5

Payment
for
A Privilege





Some men are called soon to the colors; others go later on. Some will remain at home to operate the machines that produce the arms

cision machine manufacture, Miehle was called early "to the colors." Long before Pearl Harbor, this company was manufacturing large quantities of ordnance for the U.S. Navy. In fact it is one of the first fourteen American

Industrial Concerns to receive the famous Navy "E" award for "outstanding performance in the production of naval ordnance matériel."

without which the bravest men in the world would be as chaff before the monster steel machines that wage war today. Some are given great responsibility; others very little. To each in the measure of his ability duty is assigned.

But whatever is asked, of individual or corporation alike, it should be given fully and without stint or hesitation. This is the payment every American owes for the privilege of living and being a citizen in this free, happy, and prosperous country.

With its known facilities for pre-

Since March of 1942, its facilities have been devoted almost 100% to the war effort. Very likely we shall not manufacture another Miehle press until the war is over. Very likely we shall not be able to maintain the same intimate relations with printer friends the country over. Whatever happens, we know that these same printer friends will understand why . . . for there is not one among them who, when the time comes, will not serve his country just as faithfully, unstintingly and wholeheartedly.

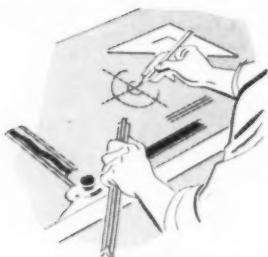
MIEHLE PRINTING PRESS & MFG. CO., Chicago, Illinois



Official U. S. Navy Photograph



The future
is what we're fighting for,
isn't it?



Every reader of this advertisement believes, somehow, that the future is worth the fight. Production records say so. Your personal sacrifices say so. Your crowded hours say so.

We read your hearts as we read our own.

But what about this future, anyway? Are we going to accept it as it is served up to us, or are we folks in industry going to do a job of pre-fabrication on it?

We can, you know.

We *can* do some Imagineering, here and now. We *can* decide where we go from here. We *can* slip an eighth day of thinking time into our crowded seven-day week, if we will.

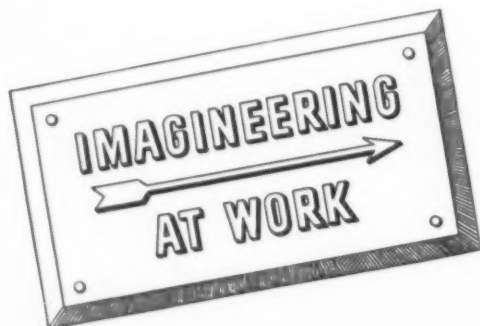
We can build new models, in our minds at least. We can take the facts and the promise of the new materials and methods we are learning about in the war, and dream them into the new products and improved services that will make new jobs.

We can even provide the wherewithal which will prime the future. Every War Bond we buy does that.

The future is more than a hope. It is a duty.

Getting together on future ideas is putting Imagineering into practice.

Might you and we do just that, for the sake of the boys who are fighting to give us all a future? ALUMINUM COMPANY OF AMERICA, 2116 Gulf Bldg., Pittsburgh, Pa.



ALCOA ALUMINUM



Trouble again! Because our salesman hasn't had time to call on him lately!



CUSTOMER: "That's the third account we've lost this week! I can't blame the salesmen. We're short-handed these days, and they've got too much territory to cover. But our customers don't worry about that. They expect service, regular contact. And I've got to give it to them right away!"



LITHOGRAPHER: "Just why I came to see you! If you can't call on customers regularly, why not send monthly broadsides to them? Explain why your men can't call so often. Lay the groundwork for better business after the war. Here's a dummy to show you what I mean..."



LITHOGRAPHER: "We can guarantee a job you'll be proud of by using Hammermill Offset. We've never had press trouble with that paper. And look at the fine reproduction you'll get on it—sharp halftones, brilliant colors, good, clean type matter. I can deliver work like that on any of 9 different finishes of Hammermill Offset."



SHOW YOUR CUSTOMERS how to replace man power with the power of paper and printing. And show them the splendid work you can deliver on Hammermill Offset. Send for latest collection of commercial specimens. Reprints of 7 top-notch offset jobs... folders, mailers, inserts... 1-color, 2-color, 4-color work... new ideas in layout and design.

HAMMERMILL OFFSET

BY THE MAKERS OF HAMMERMILL BOND

HAMMERMILL PAPER COMPANY
Erie, Pennsylvania

Please send me the latest collection of Commercial Specimens on Hammermill Offset.

Name

Position

(Please attach to your business letterhead)

ML-NO



DOES YOUR BOOKKEEPER WORK IN THE **DARK** When it's such a little way to the light ?

No business exists without Costs . . . and no business can *continue* to exist without Profits. But profits are dangerous! Too great a profit destroys a business just as surely as a too small profit. Prices must be *just* . . . just high enough to pay a profit; just low enough to maintain customer confidence.

NATIONAL ASSOCIATION OF PHOTO-LITHOGRAPHERS
1776 Broadway, New York, N. Y.

Please mail me one complete set of forms and explanatory text, "UNIFORM ACCOUNTING AND COST SYSTEM," now ready for distribution.

- ☐ We enclose check for \$10.00
☐ You may bill us for \$10.00

Firm Name

Address

Individual

And you can't determine prices unless you know your costs! Yet your cost accounting system should be so simple and economical that it will not, of itself, *increase* costs.

The National Association of Photo-Lithographers has just published such a procedure, designed for installation by any competent bookkeeper.

**IN THESE DAYS OF FAST CHANGE
YOU NEED THIS COST SYSTEM MORE
THAN EVER BEFORE. GET IT NOW!**

MODERN LITHOGRAPHY

Harvest

We are grateful that in a troubled world we can count among our blessings "the American way of life" . . . in a land of privilege and plenty we can still enjoy a deeply felt spirit of genuine thankfulness.



PLYMOUTH BLUE

GOURD YELLOW

CHESTNUT BROWN

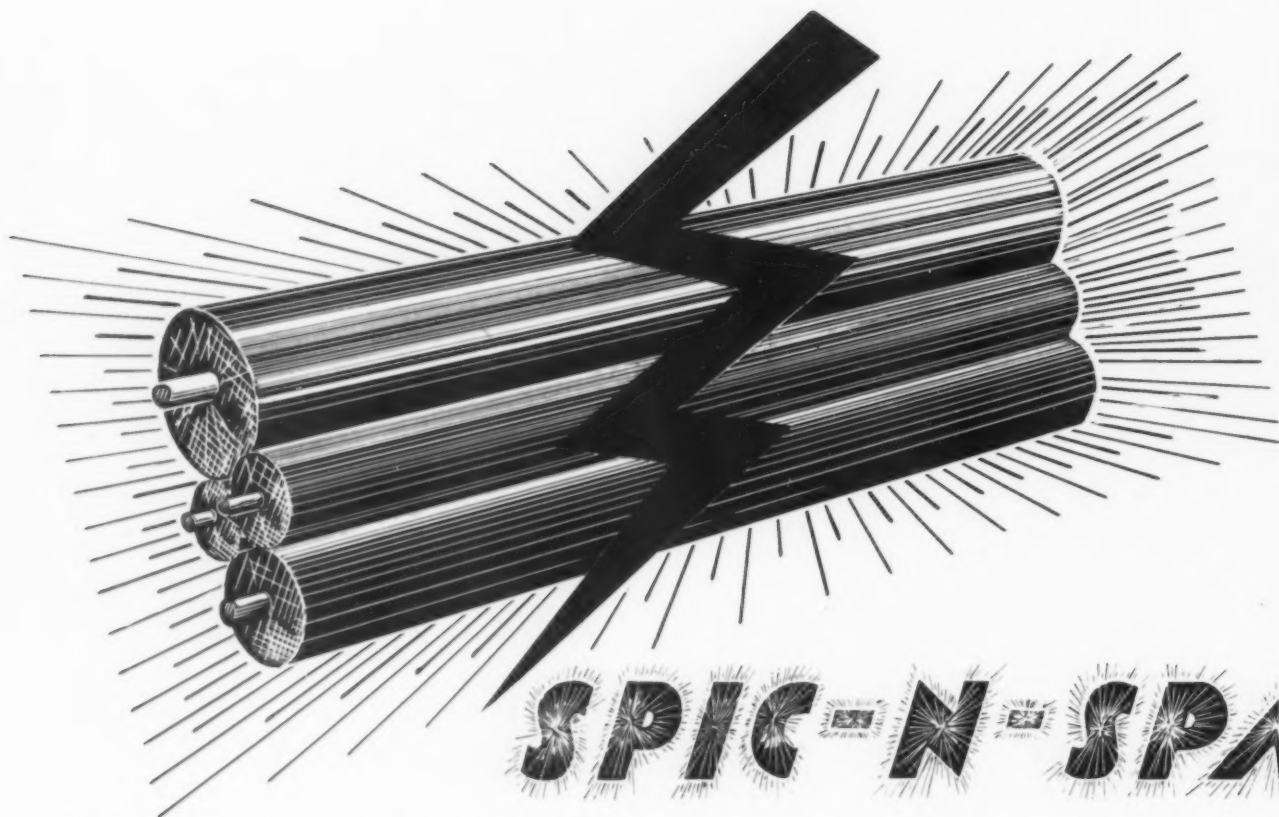
CRANBERRY RED



THE FUCHS & LANG MFG. COMPANY

(ESTABLISHED 1870)

DIVISION • GENERAL PRINTING INK CORPORATION 100 SIXTH AVENUE • NEW YORK
BOSTON CHICAGO CINCINNATI CLEVELAND PHILADELPHIA ST. LOUIS SAN FRANCISCO
FORT WORTH LOS ANGELES TORONTO, CANADA



SPIC-N-SPAN

CLEANS ROLLERS QUICKLY AND THOROUGHLY

SPIC-N-SPAN

a SAFE fast-action solvent. More powerful than naphtha or gasoline. WILL NOT EXPLODE.

SPIC-N-SPAN

is a money-saver. Actual experience has shown that it costs less per year than any other known solvent.

SPIC-N-SPAN

will give equally satisfactory results whether used with Wash-Up Machine or by hand with a rag.

SPIC-N-SPAN

has many times the solvent power of similar fluids. Result: it works faster and lasts longer.

SPIC-N-SPAN

is SAFE. It ends the dangers of explosion and spontaneous combustion. It contains no acid, alkali, carbon tetrachloride or other toxic products which give off poisonous fumes. (These are findings of the Underwriters Laboratories, their file MH2451.)

If you are interested in a material that will clean rollers thoroughly and eliminate the fire hazards of explosive solvents, we shall be glad to send you a free quart sample. See your insurance agent. Spic-N-Span may enable him to reduce your insurance rate on both buildings and contents.



THE FUCHS & LANG MFG. COMPANY

(ESTABLISHED 1870) » » DIVISION » GENERAL PRINTING INK CORPORATION

100 SIXTH AVENUE, NEW YORK, N. Y.

BOSTON	CHICAGO	CINCINNATI	CLEVELAND	PHILADELPHIA	ST. LOUIS
SAN FRANCISCO	FORT WORTH	LOS ANGELES	TORONTO, CANADA		



It looks as if Paper will have to take over

*Can paper take the place
of scarce materials?*
All our research facilities are concentrated on finding the answers.

● A lot of shelves are going to be empty unless new packaging methods can be developed.

The protection of tin and foils, of plastics and other materials, is being denied to product after product to meet the demands of war. New products are coming along that require new packaging.

All this you doubtless know. But do you know the versatility of paper?

We know something about that subject, because we've been making a thousand miles of paper a day.

And we have picked up a lot of information that may be useful to you.

Please get us right. We do not expect to pull

the answer out of a hat—certainly not in every instance.

But we've learned the knack of tackling problems and solving them when we know exactly what the problems are.

So we say—why not bring us your problems, and see what can be done?

We're willing to put our time against yours—and if we can't help, we'll say so. Why not write us today?

Oxford Paper Company

230 Park Avenue, New York, N. Y.

Mills at Rumford, Maine & West Carrollton, Ohio

Western Sales Office: 35 E. Wacker Drive, Chicago, Ill.





What does it mean to you?

When that "rush" stamp goes on your printing orders, do you expect—and get—quality results? We'll bet, then, that your printer is a constant user of Rising Papers.

Here is what one printer recently wrote about Rising Bond, in reference to an outstanding letterhead he had produced. "I believe," said he, "Rising Bond is the only sheet in the 25% rag class that would achieve these results." He said further, "Rising Bond is versatile enough in its affinity for ink to take a fine light type and heavy reverse in one impression."


Take a tip from a printer, and use Rising Bond for your letterhead. Call in your Rising merchant today.



RISING PAPER COMPANY

HOUSATONIC • MASSACHUSETTS

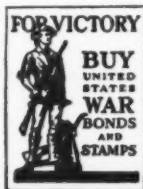
MODERN LITHOGRAPHY



WHY LITHOLASTIC ROLLERS TURN OUT BETTER PRESSWORK

Vulcan Litholastic Inking Rollers are free from stickiness, swelling and shrinkage. They have the right properties for good ink distribution. Besides getting better presswork you can save money in replacement and maintenance. Litholastic rollers contain no rubber. They are not affected by changes in temperature. The tough covering is highly resistant to abrasion, impervious to oils and driers. Users report good results with washing attachments used on Vulcan Litholastic Rollers—a good clean wash up job. For better presswork, dependability, long life and economy use Vulcan Litholastic Rollers.

Write for details about Vulcan Offset Blankets and Litholastic Inking Rollers. Please mention what types of offset presses you are using.



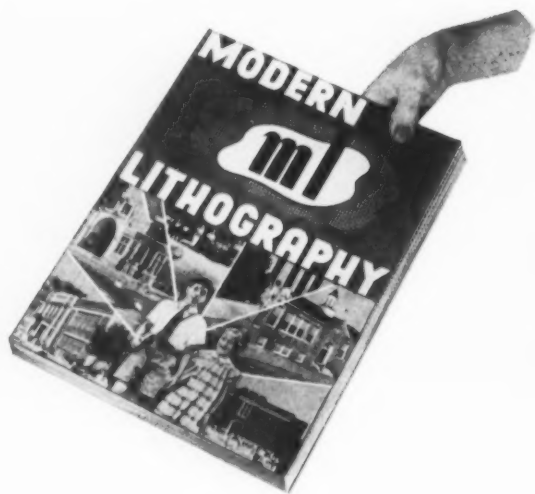
VULCAN PROOFING CO.

First Avenue and 58th Street • Brooklyn, N. Y.

Sales Representatives in Principal Cities

VULCAN

OFFSET BLANKETS and LITHOLASTIC ROLLERS



... biggest and
best circulation
among
lithographers
... *proved!*

WHICH magazine has the biggest and best *proved* circulation among lithographers? And consequently represents the best advertising medium in the lithographic industry? The answer to both questions is MODERN LITHOGRAPHY.

Application of MODERN LITHOGRAPHY for membership in the Audit Bureau Of Circulations has just been accepted, and the first official audit of the magazine's circulation released. It shows that MODERN LITHOGRAPHY has the largest paid circulation of any publication in the lithographic field offering audited reports. Total circulation is proved to be 376 copies per month larger than that of the second publication in the field, paid circulation is shown to be 198 ahead of the second paper, and MODERN LITHOGRAPHY'S figures prove circulation among 192 more lithographic plants than audit reports indicate for the second publication in the field.

Firms producing any kind of lithographic supplies or equipment are invited to write for a copy of MODERN LITHOGRAPHY'S official A.B.C. Circulation Audit for comparison. Bigger *total* circulation, more *paid* subscribers and a *broader coverage* of the lithographic field all add up to prove MODERN LITHOGRAPHY is the logical advertising medium for effectively carrying an advertising message to the buyer of lithographic supplies and equipment.

The lithographic field has shown exceptional growth over recent years,—making it an ever more attractive market. MODERN LITHOGRAPHY reaches an impressive cross-section of this industry . . . large and small firms . . . color houses as well as those who specialize in black and white work. . . Now, with its proved claim to the largest and best paid circulation in the field, it is more than ever the logical advertising medium covering this industry.

MODERN LITHOGRAPHY

254 W. 31st STREET

NEW YORK



MERCURY PRODUCTS

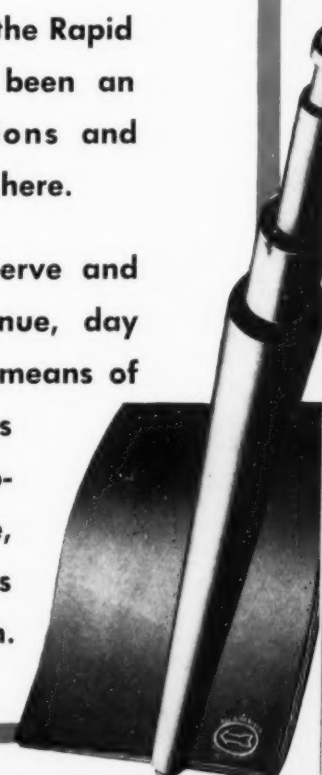
Chart New Courses
TO
LITHOGRAPHIC ACCOMPLISHMENT

THE lithographic presses of the present day operate with speed and efficiency of which lithographers scarcely dared dream not so many years ago.

By pioneering Mercury rollers and blankets with special performance characteristics for the most modern presses, we have been able to make important contributions to the Graphic Arts. This realization is highly gratifying to the chemists and engineers who

are continuously at work in the Rapid Roller laboratories. It has been an inspiration; for the traditions and ideals of service are strong here.

Urged on by the will to serve and progress, these men continue, day after day, their search for means of improving Mercury Products still further — and when tomorrow's super-presses come, Mercury Rollers and Blankets will again be ready for them.



RAPID ROLLER COMPANY

D. M. RAPPORT, Pres.

Federal at 26th Street

CHICAGO

Champion, too, sticks to its **KNITTING**



ly essential task of producing vitally important paper products in the quantity and form that best serve Government, fighting forces, and war industries. Included are pulp for explosives, paper for shell and munition wrap, food containers, army maps and blackouts, and paper substitutes for certain critical materials. Champion is proud of an ever-growing share in the war effort.

This entire organization is dedicated to every service that will help win the war. In this emergency Champion sticks to its high-

*Scrap Your
Scrap*
★



THE CHAMPION PAPER AND FIBRE CO., Hamilton, Ohio

MILLS AT HAMILTON, OHIO . . . CANTON, N. C. . . HOUSTON, TEXAS

*Manufacturers of Advertisers' and Publishers' Coated and Uncoated Papers, Cardboards, Bonds, Envelope
and Tablet Writing . . . 2,000,000 Pounds a Day*

DISTRICT SALES OFFICES

NEW YORK • CHICAGO • PHILADELPHIA • CLEVELAND • BOSTON • ST. LOUIS • CINCINNATI • ATLANTA

EDITORIALS

SOMEHOW, newspaper reports of an order supposedly being considered by the WPB, banning use of metal on all litho plates under a certain size, has gotten under our skin. It wasn't only that the story was released through the daily press, ignoring the lithographic trade papers whose readers might logically be expected to be the persons most interested, most concerned, and incidentally, most suspicious of the story. It wasn't only that unidentified "WPB officials" were reported as describing the new paper plates glowingly as "lifesavers," the inference being that they are a brand new development fresh from the inventor's laboratory. Lithographers, incidentally, have known about paper plates for several years, and are for the most part thoroughly familiar with their possibilities, as well as their very evident present limitations. It wasn't only that someone may have fallen for another sales story from a commercial source with an axe to grind, reminiscent of the glowing reports a year or so back on the possibilities of stainless steel plates.

It wasn't, we repeat, any one of these points alone, that got us riled up on the plate restriction story, although each one helped a little. What was most annoying, perhaps, was that once more even the graphic arts trade press fell for a cock and bull story, and reprinted the reported interview with unidentified "WPB officials," word for word and without any attempt at verification.

Our own efforts at verification of the story indicate that the case was definitely overstated in the much publicized United Press release. The WPB is not at the moment "drafting any order making it virtually mandatory to use the paper material for plates 22 by 29 inches or smaller." For one thing, government demand for paper plates have taken such a large proportion of the capacity of manufacturers, that up to this point commercial firms have found it difficult even to get samples of the new plates

for test. It is only normal to suppose that the WPB would be much interested in any substitute plate that might offer possibilities for saving some of the 1,500 tons of zinc that have been required annually for litho press plates in the small sizes, but we feel certain that there is no present intention of forcing smaller lithographers to use materials that would place them at an insurmountable competitive disadvantage against competitors operating larger equipment.

Should the increasing seriousness of the zinc situation eventually make some step in the direction of required use of paper or other synthetic plates seem advisable, we have every reason to believe that such an order would be very carefully considered in the light of the competitive situation. It would be manifestly unfair, for instance, to reduce the smaller lithographic plants to turning out black and white line work—planography of the type that gave the lithographic process a black eye ten years ago, and which the lithographic industry has been trying to live down ever since. This, incidentally, technical experts in the industry seem to agree is the only type of work on which paper plates, so far developed, seem to be suitable.

Should such a restrictive order eventually become necessary, we repeat, it would seem to be the rational solution to prescribe paper plates for black and white line work of a certain maximum size, leaving lithographers, both small and large, some workable ration of metal plates for turning out screened copy, color work and other jobs that could not be produced satisfactorily from paper plates. We would urgently recommend some such solution as this to the problem, should such an order eventually be found necessary by WPB. Meanwhile we might add that up to this point there has been far too much unfounded speculation by the daily newspapers, and the trade press as well, on the supposed plans and orders of the WPB.

Angela Mason replaced a man who took a war job and now she does a good job of opaquing and re-touching at Dando-Schaff, Philadelphia. Her training was in industrial art

Glamor is entering the litho plants of America as the armed forces and war work take more men



LADY LITHOGRAPHERS

By ROBERT P. LONG

EVERYWHERE hardpressed lithographers turn these days, the subject of manpower bobs up. The widespread talk of manpower shortages may seem a little far away to many litho men, until they are suddenly jolted by coming face to face with the problem in their own shop. When Joe Zilch, the best pressman in the shop, is drafted, Morrie Doe gets a commission in the Marines, and the kingpin in the camera department grabs off one of those fabled war jobs with an astronomical salary, then the ominous manpower shortage talk becomes concrete.

A decreasing volume of business might conceivably provide the solu-

tion to this problem, but a more welcome solution in many plants in many parts of the country is womanpower. "Cherchez la femme" may become the watchword of lithographers as American grandmothers lay aside their knitting to run a turret lathe on the swing shift.

Many lithographers who have long been staunch believers in the exclusive rights and ability of man in litho craftsmanship may someday have to let down the bars a little and put on a few women in their plants in order to round out their staffs. During the past year, as the armed forces and war production industries have cut deeper inroads into the available supply of labor, a definite trend toward

hiring women workers has formed in the litho industry, just as it has in almost every other industry. The President had this to say of women in industry following his recent tour of the nation's manufacturing centers: "... I was impressed by the large proportion of women employed—doing skilled manual labor running machines. As time goes on, and many more of our men enter the armed forces, this proportion will increase. Within less than a year from now, I think there will probably be as many women as men working in our war production plants." Probably more than one lithographer has had the experience of asking a draft board for deferment status for one of



Above—A girl handles editorial paste-up work on the offset newspaper *Daily World*, at Opelousas, La., another of the litho jobs that women can do well



The girl shown above, also on the *Daily World*, does advertising paste-up work. Girls also are doing many other jobs, some of which only men have done before

his "indispensable" men, only to be told, "Hire women."

The litho trade was warned, as reported here last month, by Deputy Chief E. W. Palmer of the Printing and Publishing Branch of WPB of an impending shortage of manpower. He stated that more than 14 million persons are needed for the armed forces and war work and that of this number over 8½ million are scheduled to be drawn from "non-war industry."

Many in the lithographing and printing field feel that the decline of available labor will be paralleled by a decrease in orders as well as in available supplies so that taken all together no particular phase of the situation will loom more difficult than the others. Perhaps all together they will form one of the vicious "spirals" we hear about, except that this one would be a *descending* spiral.

This conception, however, is not

holding true, for many plants have already found it impossible to get manpower enough to turn out the volume they are maintaining. These plants, in almost every instance, are placing women in their shops, as camera operators, opaquers, strippers, retouchers, platemakers, fly-boys, and in a few cases press feeders.

IN an attempt to learn more about what is actually being done MODERN LITHOGRAPHY asked lithographers in every part of the nation how they were meeting the problem, if they were hiring women, what their experience had been, what they thought of the possibilities. One hundred or more lithomen were asked these questions, and a remarkably high percentage indicated that they actually have women working in their shops at the present time. Many "viewed with alarm" such a trend. Varying conditions in different cities

created strange geographical patterns in the responses. In Ohio, North Carolina, New York, California, parts of Illinois, and Pennsylvania, the hiring of women in the shops, since Pearl Harbor, has been rather common. While responses from Texas, Washington, Wisconsin, parts of Ohio, California, and New York, and notably the city of Chicago, indicated that very few women had been placed in work commonly done by men.

An executive in a Milwaukee litho plant summed up a rather general opinion by saying, "We dread the day, but we frankly think it is coming." How does it work out? What does litho management think of these newcomers in the trade?

Louis Traung, of Stecher-Traung, San Francisco, says, "Years ago we used to have all girl feeders (hand) and also on presses, hanging paper and proofreading, and they were



TROUBLE SHOOTER

"ONE look and she knows what's going on." This apt summary of Florence Dahme, spoken by a pressman, reflects her work and the respect it commands with the men in the Plampin Litho Company shop in New York City. She is secretary of the firm and is in charge of production in a shop which specializes in point-of-sale advertising displays and also in deliveries on time.

The men in the Plampin shop will tell you that "Dahme" can not only tell them how to meet problems but can also step in and do the job if necessary. In short, she's the plant's trouble-shooter.

"Dahme" has a background in art and photography which equips her for her present position. Following her graduation in 1925 from Cornell University's College of Architecture, she did animated drawings for industrial films, and designed movie titles for coming attractions in the days of silent flickers, working in her uncle's studios. Later the studio turned to color photography and before the development of Kodachrome, a set of color plates were made from one of Dahme's transparencies. This was later reproduced in the 4th Production Yearbook in 1938. Thus she might be said to be a pioneer in color photography.

Having sales work as one of her ambitions she took a selling job with Plampin and after two weeks of pavement pounding, Metropolitan Life Insurance Co. came through with her first order. Like all salesmen she wanted the production department to produce something better. "If you think you can do better, go ahead and try it," was one of the precepts of Plampin's president, R. L. Young, and that is how she got into production—she tried it. Now "Dahme" can do anything in the plant except grain a plate or run a press. Today she starts every job rolling through the plant and straightens out any trouble that develops at any point.

She is responsible for getting new men started off right, and says, "When a man comes to work for us, I follow the Plampin tradition of giving him enough rope to hang himself. If he lasts two weeks he usually can have a job with the company for life."

good." Mr. Traung told MODERN LITHOGRAPHY his firm is employing women at present on presses as feeder operators and fly-girls. Asked "Do you think women will find an increasingly important place in the industry?" his reply was, "Yes, very much so."

From a Buffalo plant which has women in the art and creative department and as opaquers and retouchers, came this: "We are planning to try them out in camera and platemaking and see no reason why, if selected carefully, they cannot make good."

William H. Jensen, superintendent of the offset department at Dando-Schaff Printing and Publishing Co., Philadelphia, which already has girls in the shop as production manager, camera operator, and stripper, told MODERN LITHOGRAPHY: "I am completely satisfied with the way the girls take hold of the work. Their work is as good as that of the men in the shop. The only drawback is the 44 hour a week time limit, which is sometimes difficult on rush jobs."

A. G. Gordon, president of Winston Printing Co., Winston-Salem, N. C., writes:

"We operate both printing and lithographic plant and use women in the bindery. We are also training

women to watch the color on the presses while the presses are in operation as we find women are more adaptable to watching closely than young men. Furthermore, as soon as we start a young man on this job it is only a short time until he enlists in the Army or is drafted and it is necessary for us to use women wherever possible.

"At the present time we are training one woman in retouching and expect to teach her to operate the camera. We are also looking for a young woman with some training in plate making, also one that knows something about commercial drawing as we are located rather far away from the big centers and it is necessary for us to do considerable art work here in our plant and the young man we had has enlisted in the Army which leaves us a little handicapped."

B. Pherson, secretary of Otto Zimmerman & Son Co., Cincinnati, states that they already have women in creative, art, retouching and opaquing departments and that they are contemplating placing them in platemaking work. He says they have worked satisfactorily. The H. S. Crocker Co., San Francisco, expects to use women as fly-girls and feeders on litho presses "as men are leaving the industry rapidly for the armed forces,



For some time women have been employed by the Forbes Lithograph Manufacturing Co., Boston. Shown above are women operators on the firm's die stamping presses

shipyards, etc." This firm already has them doing such things as sewing dampening rollers, die cutting, inspecting, and layout work.

The Steck Co., Austin, Texas, has had women in the bindery, which is common everywhere, and believes that women will later on find a place in opaquing, outlining, and laying out. J. B. Smith, Jr., of the Photo Reproduction Corp., New York, says, "At intervals in 1934 we used our typists when not typing, to opaque negatives. Being mostly young girls and mingling with a comparatively young shop crew considerable disorder resulted in errors and we discontinued the practice. We believe we will have to begin to train young women for all operations but plate and presswork."

William Krueger, of W.A. Krueger Co., contributes a Milwaukee viewpoint, with, "We tried them (women) in the art department but find they do not possess the education men do, and if you try training them the turnover is too great. Of course, now, the turnover is very great on men, so we may have to use women."

An executive of a Peoria, Ill., plant finds that "girls make best paste-up artists, ruling up forms, pasting up house organs, etc. Men are better at layout but we use girls to follow up

from the original layouts and produce the finished art work for the cameras. This does not apply to fine color work. . . ."

MODERN LITHOGRAPHY'S reporter, in calling on plants in Chicago, found in most cases that few women were replacing men in the plants there, and that Chicago lithomen had definite opinions on the subject.

Chicago lithographers have, for some time, been pondering the practicality of employing women to compensate for the manpower shortage in their plants. In a number of plants in that city women have been used for opaquing jobs for several years, but, so far as could be ascertained, no woman has lately been employed for other lithographing operations formerly considered as exclusively for men. That they may have to come to it eventually a number of plant executives agree. But they also manifest unanimity in the intention to "put off that evil day" as long as possible.

For about two years the labor shortage in Chicago shops has grown steadily worse and this situation is rapidly reaching an acute stage. Plants in and around that city for production of tanks, planes, guns and



LITHO KINGPIN

"SHE'S the Kingpin in our plant."

That's the way the plant superintendent describes Miss Mary Waschler, youthful brunette who has practically grown up in the litho plant of Dando-Schaff Printing & Publishing Co., Philadelphia. Every litho job that comes into the plant is handled, checked and rechecked by Miss Waschler, from the time the salesman brings it in, until the last sheet is off one of the five presses and the bindery has it well in hand.

Mary does most of the paste-up work, assembles the solar prints and proofs for the customer's approval, supervises the layout and imposition, okays the press sheet, and checks the bindery in the final assembly and binding of the job.

When Miss Waschler "drifted" as she says, into the litho plant where she still holds forth, it was known as the Dando Co. That was almost 20 years ago. She started in the bindery, soon graduated to the switchboard, then into typing for reproduction, and later into production work in the firm's letterpress division. From there she went into offset production and her present work. She received her litho training the hard way, by working at it day after day. After becoming more interested she entered a general litho and platemaking course sponsored by the Lithographic Technical Foundation, attending classes at night.

She believes that women can have a definite place in the litho industry and that such work offers an interesting job for girls, not only as substitutes for men, but on the merit of the work and ability of the girls. Her own record might be proof enough.

Further proof is to be found in the Dando-Schaff plant itself. During the past year one of the men doing retouching and opaquing work left for a war production job, and a camera operator joined the Army. Finding it impossible to replace these losses with men, the firm hired two girls who are now giving a good account of themselves in these jobs. These are Angela Mason and Margaret Poole whose pictures form a part of the accompanying article. Miss Poole appears on the cover and Miss Mason on page 18.



Shown here is the mounting and die cutting room at Forbes Lithograph where women die cut, mount and assemble advertising cut-outs and display pieces

explosives have lured men from the offset industry by offering wages with which lithographers cannot compete and which, on the average, run one-third higher than the prevailing scale in the litho trade.

Demands of Selective Service have, of course, played a large part in depleting the manpower reservoir and will continue to do so. Chicago Local No. 4 of the Amalgamated Lithographers of America reports that, up to Sept. 15, 158 of its members have entered the services. Added to that is an unknown, but probably larger number of others drawn from Chicago open shops.

Percentage losses in individual establishments vary. One plant with 200 employees has lost 32 and expects 20 more to go. One with 500 employees has almost 100 names on its Honor Roll and this is steadily lengthening. Another with 45 in both front office and shop has 15 in the armed forces. For a city-wide average, however, Chicagoans conservatively estimate their losses of trained lithographers to the services at from 15 to 20 per cent.

Some cases of "pirating" have occurred, it was reliably stated, but the Chicago Lithographers Association and the local union organization are cooperating closely to stop this practice of luring men from one plant to another by offers of higher wages.

Several conferences between the Association and the Union have been held during the past summer at which all angles of the labor situation have been surveyed and remedial measures discussed.

C. T. Fairbanks, president of Edwards & Deutsch Lithographing Co., who is also president of a local Lithographers Association, stated that a program has been drawn up which is aimed to assist members of this organization—who represent most of the larger Chicago plants—to act uniformly on all problems as they arise.

Most acute point at which the labor shortage is felt is in the ranks of press feeders and helpers, most of whom are young men, subject to the draft or susceptible to the lure of higher pay elsewhere. Cases were reported where, because these men were not available, presses had to stand

idle, although jobs were waiting to be finished. It is on the possibility of using women for press feeders and helpers that most thought and study has been given in Chicago, inquiries addressed to different plant executives made clear. Some were definitely against the idea; others more moderate; but all agreed that there are many difficulties in the way before women could be developed into capable feeders and helpers. Some authorized quotations from the remarks of several Chicago lithographers will indicate which way the wind blows in the windy city.

"Women are all right for light work, such as opaquing and we have them doing that in our plant," said Alfred Baasch, superintendent of Magill-Weinsheimer Co., "but our company sees no great advantage in employing them elsewhere in the litho department, and we would not encourage them there. We would hesitate to let them out on the floor, especially in the press room. Loading the presses is heavy work to which women are not adapted and it is also dangerous to have them around mov-



Jessie M. Kehoe (left) and her sister Mildred



Chicago Tribune, wandered into a trade convention and was fascinated by a little offset press used in photo-lithography. She had \$500 and 500 feet of floor space and vision, so she bought the press. Today this venture has been built into an organization with over 5,000 feet of floor space, and the fully-equipped plant has taken its place among other successful offset plants. The firm came into national prominence in the trade in 1940 when Jessie was elected a director of the National Association of Photo-Lithographers.

Jessie is now devoting most of her efforts to sales work, while Mildred is the technician, being adept at trouble shooting in all parts of the shop, and often operating presses, and making or regaining plates herself.

The Kehoe sisters are quite enthused about the opportunities offered to women in the offset business. "We would really like to see more women in lithography," Jessie said, "Lithography is a real career for women, especially in camera, plate-making and layout. Few women have any idea at all about the opportunities in this trade. There ought to be some publicity done on the possibilities in this field, especially in the operations to which women are best adapted. Because of the labor shortage, now is a good time to start it."

UNIQUE SISTERS

UNIQUE in the annals of offset printing is the firm of Kehoe and Lau, which is entirely directed by two Lady Lithographers. At the head of this Chicago offset plant are Miss Jessie M. Kehoe, and her sister Mildred who in

private life is Mrs. Willy Lau. The record of these sisters in the industry is not only unique but enviable.

The offset careers of Jessie and Mildred sprang from a venture 18 years ago when they joined the ranks of Chicago's businesses by launching the Kehoe & Kehoe mimeograph letter service. For five years the young ladies prospered until in 1929 their customers began crumbling around them. But about that time Jessie, according to an account in the

MODERN LITHOGRAPHY

ing machinery, although if they wore slacks the hazard would be reduced.

"We have been able to replace some of our labor losses by hiring men over 50, who had retired from active work but who are willing to return to duty in the emergency. We are also hiring some younger men from the 4-F draft class who cannot get into military service because of slight physical handicaps. Some of them had been unable to find work although capable of handling it. Now they find they are wanted and those we have hired are grateful for the opportunities opened to them. They are appreciative and attentive and those who have even some slight mechanical aptitude adapt themselves to our jobs very quickly."

Another executive of a large plant who requested anonymity said his company has had no experience with women in their litho department but that thought has been given to the possibilities of taking them on. This company's Harris presses use 34 x 44" paper stock, he said, and for a woman the lifting of half a ream in loading or removing would be difficult. A considerable training period would also be necessary, he felt, before they could become at all useful. Women might be used for platemaking, he admitted, but there again would need technical training from the ground up. In preparing layouts for the camera he thought they could be of real service, thus releasing men for other work. They could also operate cameras, he suggested, but would need training for which time is lacking.

"However," he continued, "I wouldn't be surprised to see women employed more and more in the open shops. It will not happen in the closed shops, though. To be at all useful they need training and if we do not get cooperation from the union heads there is no opportunity to train them in union shops. If we tried it and the union objected, they could pull off their men and we'd have a bigger problem on our hands. In our shop the men are all relatively young fellows. We have lost a fourth of them already and more are to go.



TOP TECHNICIAN

A LOOK at the varied activities of Mrs. Irene Sayre might make one wonder if her outstanding record of achievement in the lithographic industry isn't but the least of her accomplishments. Besides excelling in creative layout, all phases of technical lithography, teaching lithography, and serving as technical editor of *MODERN LITHOGRAPHY*, Mrs. Sayre has also found time to become lecturer, pianist, organist, author, sculptress, and airplane pilot. During the last five years she has appeared as a speaker at many graphic arts conventions, is the only woman speaker ever to address the Craftsmen's Club of Chicago, and is on the speaker's rostrum of the International Association of Printing House Craftsmen

for offset platemaking and camera work. As if this isn't enough, she is also the author of *Photography and Platemaking for Photo-lithography*, one of the outstanding technical books in the industry and textbook for the Chicago School of Printing and Lithography where she also taught for five years.

Irene is a graduate of Dakota Wesleyan University, Teachers College at Columbia University, and has studied music in a prominent New York school. Her graphic arts experience springs from a job she took with a New York advertising agency specializing in direct mail where she did layouts, paste-ups and assisted with plate and camera work. She later became supervisor of layout and paste-up with an eastern printing firm, and worked at platemaking and color separation. Returning to the middlewest she worked for a firm making films and plates for the trade, where she was in charge of all work from the time the copy was brought in until the job was delivered. This work included all phases of black and white, color separation and color process. Joining the staff of the Chicago School of Printing she was made supervisor of the plate and camera department for lithography and taught albumen and deep etch platemaking, layout, paste-up, blue prints on plates and paper, continuous tone and halftone negative making, color separation, color process, and Kodachrome process work. Since then she has served as technical adviser and assistant production manager of Photo Press, Inc., Chicago, and at present is playing an integral but unpublicized role in the war effort.

As for women in the litho industry, she says, "Everywhere I go I see women being trained to work in litho shops. . . . They are photographers, platemakers and pressmen. . . . Where girls are being used, many employers say they prefer them to men as they are much more painstaking and meticulous in their work. This of course is a distinct advantage in lithography."

So we've got to get busy thinking this all out."

Theodore Regensteiner, president of the Regensteiner Corp., declared emphatically his opposition to women in the litho department.

"Years ago," said Mr. Regensteiner, "women were used as feeders on the smaller size presses where they could sit on stools and feed by hand. They were never any good on the big presses and on the automatics now in use they couldn't handle the heavy stock. So they'd be no good to us. They would have to be trained and it would be a long while before we could make anything out of them. It's possible, of course, that we may

eventually be confronted with this problem. When we get up against it, we can settle it in due course. Meanwhile, my company is finding labor replacements among the men of 45 and over."

Women are doing all right in the finishing end of lithography, Carl Nordberg of Chicago Offset Printing Co., pointed out. "But I'm rather of the opinion," he added, "that it is impossible to use women on the presses or in platemaking. At least I cannot see anything practical in the proposal right now. Some lithographers think women can be found intelligent enough to feed presses.

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LITHOGRAPHED POSTERS IN A WORLD AT WAR



OFFSET lithography is playing many important roles in the war, some relatively obscure, like the production of war stamp albums or ration books, and others dramatic. One of the most interesting roles and undoubtedly the most dramatic is the production of stirring war posters which are becoming one of the most important mediums for conveying messages to embattled peoples everywhere.

One of the best collections of American industrial war posters is contained in the book "Posters used by American Industries as War Production Incentives," published recently by the S. D. Warren Company. Many lithographers have undoubtedly studied these posters and may have seen in them a broadening wartime market in this field.

A number of competitions have been held by various organizations and winning posters exhibited in many cities. Many of these originals are available to lithographers for submission to customers or government agencies who may be willing to order quantities of them for distribution in war production plants or other places.

One such exhibit is scheduled to begin November 25 and will run into January, 1943, at The Museum of Modern Art, New York. This exhibit will contain the winning art work of a national war poster competition held under the joint auspices of Artists for Victory, the Council for Democracy, and the museum. All rights of reproduction of these posters will be available to lithographers at reasonable prices, according to an announcement.

On this page top to bottom—BRITAIN, the caption "Together" is typical of the Empire; DENMARK, produced in New York by Crafton Graphic Co. for Natl. America Denmark Assn.; Lower—This striking poster was produced in the DUTCH WEST INDIES; the Oriental poster was produced in CHINA; Gossip's Their Guide" is by B. G. Lithographic Co., Georgetown, BRITISH GUIANA; "Wanted in Prague" was produced in New York by Sackett & Wilhelms for CZECHOSLOVAK Information Service

Another available source of original art work for reproduction with a company credit line at the bottom of each poster is a group of posters built around the theme "The Walls Have Ears." These posters, which have recently been on display at the Museum of Science and Industry, RCA Building, New York, have been created by internationally known artists, cartoonists, photographers and designers, including such names as Alexander Brook, Bobri, Eric, Franklin Watkins, Ludwig Bemelmens, John Grohe, J. D. Leonard and others. The idea behind this project is to offer an opportunity for industrialists, large companies and small firms to obtain the rights for either black and white or full color reproductions of these posters at no cost, thus advertising the firm's name and at the same time contributing vital help to the continuing drive to stamp out careless talk. A small part of this collection is reproduced in *Modern Lithography's* group in connection with this article. Further information is available to *ML* readers.

The best American posters as chosen by war workers were shown in the October 23 issue of *Printers' Ink*, and on November 2, *Life* published prize-winning Latin American posters.

Lithographed posters being produced by foreign governments to promote the war effort of the United Nations have not been widely publicized and believing that they would be of interest to American lithographers *Modern Lithography* presents reproductions of its collection of

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Posters top to bottom: DUTCH EAST INDIES, produced in the far Pacific before the Japs arrived; AUSTRALIA, produced "down under"; "Honneur et Patrie" is a FREE FRENCH job by March of Time; Caption on the RUSSIAN cartoon poster, at the bottom, says, "Pictorial Presentation of the True Aryan". Top—"Your Countrymen are Hitting Back at Home" was lithographed in London for Inter-Allied; JUGOSLAVIA ship poster is by King Lithographing Co. for Inter-Allied; "When . . ." is one of the best from CANADA

DE STADSWACHT



Your Countrymen
are hitting back
at home

JUGOSLAVIA'S



ONE IN-ALL IN
JOIN THE A-I-F TODAY



HONNEUR ET PATRIE



ПЯТНОЕ ИЗОБРАЖЕНИЕ "АРИЙСКОГО" ПРОИСХОЖДЕНИЯ

ЕЛОКУР

СТРОЕН

КРАСИВ



КАК ГИТЛЕР.

КАК ГЕРИНГ.

КАК ГЕББЕЛЬС.



Pitfalls in Wartime Operation

IN view of shrinking supplies and possible further restrictions on the use of chemicals, films and other items necessary for the photographic operations of lithography, it becomes urgent to obtain the utmost from available equipment, material and manpower. Not only will such conservation be a vital contribution to the war effort but the resulting savings and improved efficiency will prove wise business economy. It is the purpose of this paper to review how such aims might be accomplished.

The first step in conserving material and time is to bring under control or eliminate entirely the many variable factors present in the photographic routine. A number of these variables have always existed but others have been introduced recently by virtue of war conditions. To understand and

control them will contribute greatly to a reduction in errors and re-makes.

The rapid expansion of heavy industry in many localities has imposed unusually high demands on existing power facilities. Because of the heavy current demand this may result in fluctuations in the available current. Arc lights and incandescent lamps are subject to variation in light output with variations in the electric current. In the conversion of electric current into light rays, there are two variable factors involved whose balance is upset by variations in the current. At a given or fixed voltage, arc-lamps and tungsten lamps produce light rays of a specific color value and candlepower strength. With a decrease in the voltage these same illuminants will deliver less light (measured in terms of candlepower) and the light rays will

contain less blue rays. Conversely, greater than normal voltage will increase the light strength as well as increase the percentage of blue rays. It is obvious therefore that current fluctuations will disproportionately alter the ratio of light strength and color value. Since the speed and color sensitivity of photographic plates and films is a fixed quantity it follows that exposure values will be greatly influenced by current variations. Although we can compensate for the loss of light volume by means of increased exposure (and vice versa), it is not always possible to make satisfactory compensation for a loss or variation in the color balance of the light source. This is particularly true in regard to screened and continuous tone separation negatives.

It has been found that many errors

Opposite page—In producing negatives the author warns of impure water supply, dissolved chemical impurities, scums and stains and gives points for handling them

In these times it is of the utmost urgency to obtain the most from the least in manpower, equipment and supplies. Here are everyday problems which are common in war-time operation and suggested solutions taken from the author's abundant storehouse of practical experience

BY HERBERT PASCHEL HAROLD M. PITMAN COMPANY

in exposure can be attributed to a light source of varying strength.

In order not to sustain a high loss in time and material, in such cases, corrective measures must be taken. It is imperative that the camera lamps have available a uniform supply of current. If the current variation is caused at the source (power plant) the corrective measures are the responsibility of the utility engineers. In many cases, however, the variation may be caused within the plant by overloading the line from which the camera lamps draw their power. The amount of current available to the camera lamps then depends upon the other equipment operated at the same time. The solution here is to provide a separate line for the camera lamps. Defective wiring or lamp mechanism can also contribute to varying lamp output. Equipment should be tested and overhauled where necessary. In extreme cases where current fluctuations cannot be eliminated or regulated, the only practical solution lies in determining when the least fluctuation occurs. The routine of the photographic department must then be regu-

lated so that all critical work (such as color separation, etc.) can be done during that time.

THE great volume of water consumed by defense industries has made it necessary for many communities to draw upon auxiliary reservoirs, artesian wells, etc., with the result that the character of the tap water may have changed considerably. Although tap water is generally suitable for most photographic purposes, certain impurities have very harmful effects. If any difficulty is experienced with photographic solutions it would be advisable to use distilled water for all of the solutions involved.

If the trouble is eliminated by the use of distilled water, the troublesome condition can be attributed to some impurity in the tap water. In such a case the most practical solution would be the continued use of distilled water. As a general rule, however, troublesome impurities can be removed thus rendering the tap water suitable for use.

Described in detail, the impurities contained in tap water may be as follows—

(a) Dissolved chemicals such as

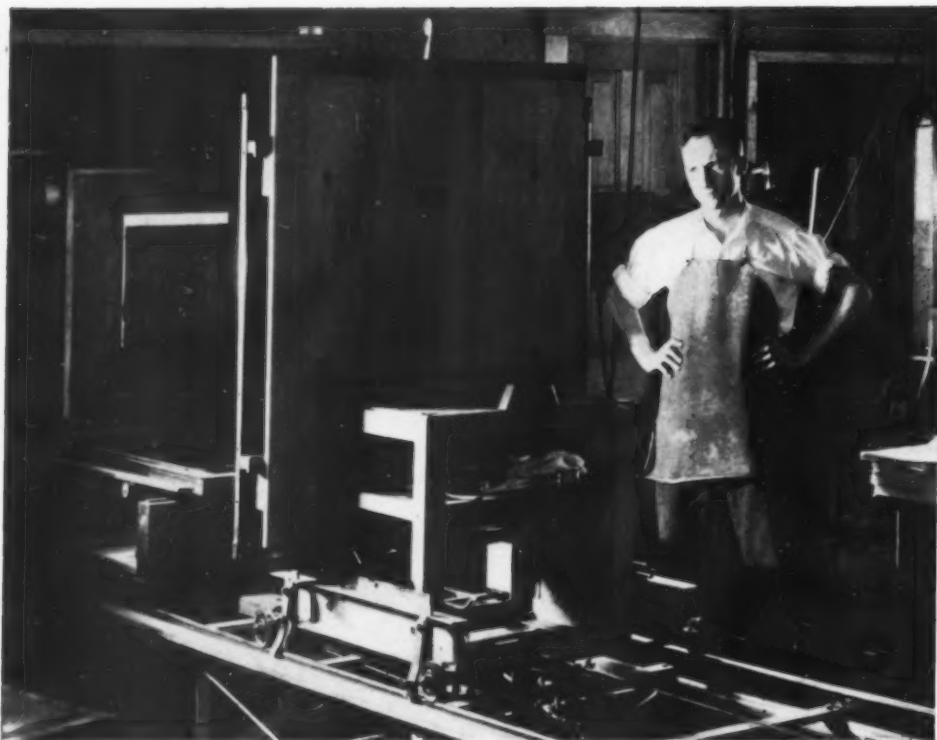
bicarbonates, sodium chloride, calcium sulphate, magnesium sulphate and the sulphates of potassium and sodium.

(b) Dissolved gases such as air, carbon dioxide, sulphur dioxide, hydrogen sulphide and chlorine.

(c) Foreign particles such as mud, decayed vegetation, fungus growths, iron rust, free sulphur, etc.

Calcium salts usually found in tap water do not interfere with the life or effect of a developer. A sludge may form however which can cause spots and other blemishes on a film or plate. The calcium salts can be eliminated by letting the freshly prepared solution stand undisturbed for several hours. The precipitate or sludge will settle to the bottom of the container and the clear liquid drawn off for use.

Metallic sulphides as well as hydrogen sulphide present in a developer will produce a serious fog. Free sulphur will also cause a similar condition. Water containing such impurities can be purified by the addition of 1 gram of lead acetate per liter of developer (60 grains per gallon). The lead acetate is added to the water before mixing. The lead salt reacts with the sulphides to form lead sulphide. After the solution is mixed the lead salts are precipitated. Upon



Unusually heavy demands on power lines in many localities produce variations in arc lights and incandescent lamps which prevent the making of uniform plates and negatives. The author tells how this condition may be corrected

standing, the precipitate settles and the clear liquid drawn off for use.

Air in tap water may cause a premature exhaustion or oxidation of the developing agent. This in turn may give rise to a heavy stain on films and plates developed therein. Aerated water is also the cause of spots and pinholes due to airbells clinging to the emulsion and retarding development. This can be alleviated somewhat by adding a suitable wetting agent to the developing solution. Air may be removed from water by boiling and letting the liquid stand undisturbed for several hours. This practice will release most of the air thus making the water entirely suitable for use.

Decayed vegetable matter, fungus growths and other organic matter will form sludges which accumulate in the developer and result in spots and stains on films and plates. In addition, the sludge may react with the chemicals in the developer to produce a heavy fog. This condition may be remedied to some extent by boiling the water. The suspended matter will settle upon standing. The clear liquid will generally prove satisfactory. Filtering, especially through activated charcoal, is helpful.

UNDER certain conditions some difficulty may be encountered with impure water in regard to washing films and plates. Dissolved chemicals which remain in the emulsion will crystallize upon drying, causing a scum on the emulsion surface. This may give rise to stains upon after treatment such as reducing, intensifying, dot etching, etc. The same is true of sludges which may remain on the emulsion surface. In addition, the crystallization of salts and adherence of scum and other foreign matter on the emulsion surface may retard a smooth application of opaque and cause unevenness when applying negative stain. The following procedure will alleviate the above mentioned hazards:

- (1) Provide an efficient filtering method to remove all but the microscopic insoluble impurities.

- (2) Remove all excess moisture from the film surfaces by means of squeegee, viscose sponge or cotton swab before drying.

- (3) In severe cases rinse the negatives in several changes of distilled water before drying. To the final rinse add a few drops of a suitable wetting agent.

Solutions, Chemicals, Formulas

IT is good practice to follow the film or plate manufacturer's advice in compounding the necessary processing solutions. This will assure that the solutions are well suited to the film or plate used. It is not always possible, however, to obtain the particular chemical, or form of chemical the formula calls for. The changes that become necessary must be made accurately so that the resulting solution will have the desired characteristics. The following is a brief outline of permissible substitutions and rates of equivalence when using different forms of the same chemical.

Sodium hydroxide (caustic Soda) and potassium hydroxide (caustic Potash) may be interchanged if necessary in the ratio of 5 parts of caustic soda to 7 parts of the potassium salt.

Potassium metabisulphite and sodium bisulphite are interchangeable at equal weights except in a few rare instances where the slightly higher acidity of the potassium salt is desirable.

Sodium carbonate and potassium carbonate may be used interchangeably at equal weight. The potassium

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Zinc, Paper Restrictions Dominate Supply Outlook

RAW material shortages have come to the fore during recent weeks as a continuing threat to future operations of the lithographic industry. The metal situation has reached the drastic stage, new zinc plates may shortly be even more difficult to obtain, and talk is heard of an order eliminating metal plates entirely for operators of presses below certain sizes. The paper situation tightens, with pulp shipments from the west coast banned, and paper manufacturers rationed on their future production. Meanwhile lithographers are encountering shortages of such odds and ends as graining balls, a small item in itself but capable of interfering with production or forcing the lithographer into an impossible search for a satisfactory substitute which may not be obtainable. As we see it, the race from here in to the finish will be between raw material and labor supplies, on one hand, and dwindling litho markets, on the other, to see whether markets or operating ability of the industry loses the race first.

From the confused picture zinc emerges as the critical material offering the most serious problem of supply to the lithographic industry. The prediction has been made in recent weeks that an A-10 priority rating may not get zinc for lithographic use much longer, and with three new munitions plants reported ready to open this month it seems a certainty that increased war demand may very shortly restrict even more drastically the amounts of critical metals that

can be spared for even the most essential civilian uses.

Lithographers are at the moment restricted to 50% of their 1941 rate on new zinc plates. From current comment in the trade it is indicated that this has as yet created no great problem, particularly since the obsolete plate order has forced back into active use such a large number of plates which had formerly been held for possible re-runs. It is obvious, however, that this is a non-recurring source of metal, and once the existing stock of obsolete plates is regained and put back into active use, possibilities of further replenishment of stock from this direction will decline sharply.

Meanwhile the newspaper publishers, who have likewise been limited to 50% quotas, have been putting up strong protests with WPB for an increase in their permitted usage. The possibility seems to exist that this figure may be upped, accompanied by a switch to a lower grade of zinc not competed for by the war industries. If liberalization of the order is obtained by the newspaper group, it would seem that lithographers also might have a good case to present.

Another possibility for relief seems to lie in the expectation that a new toll rolling arrangement may shortly be agreed upon. An order is reported to be near the approval stage in Washington, but there is no assurance, of course, that it might not hit further snags before being made official.

The zinc scrap disposal situation

seems to be the subject of much confusion in the industry at the moment. Lithographers have been urged to turn in their scrap to the rolling mills which normally produce lithographic plates, with the idea of keeping as much zinc as possible within the industry. Yet in many cases they have found that the mills do not want litho zinc scrap. They are able to use only a limited amount of scrap in their rolling operations, and with their present rate of production at low levels they find that they have more than they can use without seeking further scrap from the industry. They are suggesting in some cases that lithographers simply turn their scrap in to junk dealers, but lithographers in general have been loath to do this, feeling that it might be more sensible policy to hold their scrap against possible re-establishment of some sort of toll rolling arrangement.

Much added concern over the zinc plate situation has been contributed in recent weeks by the appearance in a number of newspapers of a story, attributed to certain unnamed "WPB officials" that an order making it "virtually mandatory to use paper plates for sizes 22 x 29 inches or smaller" is being drafted by WPB.

Upon investigating we find that the correspondent who wrote this story was apparently more enthusiastic than accurate, for no such order is at present contemplated. There is always the future possibility that some such step might be taken, as the WPB is of course anxious to reduce zinc consumption by the graphic arts in-

dustries wherever it can be effected. At the present time, however, production of these paper plates has not reached a high enough point to do more than meet government needs, and it is difficult to see how paper plates can be counted on at the moment to assume any important role in filling commercial plant needs,—even for the black and white line work for which they are best fitted.

Another supply problem has arisen in recent months on steel graining balls which are reported to be almost unobtainable. This is currently giving concern only to grainers and to the relatively small group of lithographers who grain their own plates, but it could over the course of the coming year develop into a very serious situation.

TURNING from metal to paper, the industry saw on October 30th the first step in a program under which the WPB apparently plans to concentrate the paper industry and to reduce output over the coming year. Earlier in the month an order was reported in preparation which would have restricted output of paper mills by an unnamed percentage, based on their August-September rate of operations. Such a base period, it was objected, would have worked an undue hardship on some paper mills which had shut down or reduced operations during July and August to make repairs, so that this period did not reflect their normal operating rates.

Recognizing the validity of these objections, the WPB shelved the original order, and instead issued on October 30th General Conservation Order M-241, which had the effect of freezing rates of production by paper mills at average operating rates for the six months' period April 1 to September 30, 1942. The purpose of this freezing order was apparently to stop the tendency of paper mills to boost operating rates and inventories in anticipation of production curtailment. The order is believed to be merely a first move and a temporary expedient, to be followed in the near future by more drastic and carefully studied curtailment. For

the paper industry as a whole this order is reported to have stabilized production temporarily at approximately 87% of theoretical capacity.

A special provision is contained in the order for concerns owning only one paper machine. These small manufacturers are allowed to operate 120 hours each week without regard to the average rate of production during the base period. This provision is understood to aim at maintaining these mills in operation until a final decision can be made as to their integration into an overall plan of concentration for the industry. Freezing of output for small mills, many of which are subject to seasonal fluctuations, might have created undesired difficulties.

The order also contains a provision for larger concerns owning more than one mill. These concerns may submit concentration plans of their own to the WPB, providing for increase of production above the recent average in one mill and offsetting it by a sharper reduction or complete shutdown of another one. However, these plans may not be put into operation before approval of the WPB is received.

Further problems were faced by the paper industry as a result of WPB action earlier in the month in banning shipments of pulp from the west coast for a two-month period, which it is expected incidentally may possibly be extended for the duration of the war. Paper mills which buy their pulp in the open market were hardest hit by this order, although the WPB is understood to have diverted some Eastern, Lake States and Canadian pulp to replace part of the shipments cut off from the west coast. There is the further possibility that mills which produce their own pulp may also be required to make a certain amount of pulp available for sale in the open market, although not too much relief can be counted on from this direction as the wet pulp which they produce cannot stand long rail shipment.

A further restrictive development in the paper field last month was the issuance by WPB on October 29th of a revision to Limitation Order

L-120. The new regulations reduce number of allowable grades from 82 to 52 and the number of items in various sizes, colors and weights from 10,000 to 2,500.

Added paper note—inventory restrictions on paper again became applicable on October 1. Restrictions had been relaxed for several months to allow users to build up inventories, but restrictions imposed by paragraph 944.14 of Priorities Regulation No. 1 are now again in full effect.

ONE lithographic item over which concern has been expressed recently is Scotch Tape. However, MODERN LITHOGRAPHY, in attempting to clear this up, asked Minnesota Mining & Manufacturing Co., St. Paul, leading manufacturers of the product, just what the status is. A. H. Redpath of that company calls any such shortage an "unfounded rumor." He says the manufacture of Scotch tape has not stopped and that "we shall continue to have tape for an indefinite period." He stated that the need for tape in many war industries has interfered to some extent in the servicing of non-war commercial orders and that these delays may have prompted the rumors that tape manufacture had stopped completely.

It was feared for a time that gasoline for wash-ups would also present a problem, but it is indicated now that the OPA will allow extra gasoline rations for this purpose. The correct procedure, says the LNA in a recent bulletin, is to apply at your local rationing board and fill out an application for an "E" or "R" ration card, both of which cover non-highway use of gasoline. If the permit is obtained before November 22, it is good for six months. If obtained after that date it is good for only three months. Permits are renewable.

On litho inks the WPB reports that "the market situation still is easy with no immediate sign of change." On steel stitching wire, however, the situation is becoming more critical daily. "Elimination of stitching or drastic reduction in the number of stitches in all printed products to the absolute minimum" is absolutely essential, said the WPB. ★ ★

MODERN LITHOGRAPHY

ESSENTIALITY...

Key to Litho Industry's Future— Trade Group Studies Concentration

By JAY A. BONWIT

THE inevitable shortages of a wartime economy are casting their shadows more perceptibly over the lithographic industry, with the likelihood now becoming apparent that curtailment of production will be necessary.

The essential character of the printing and publishing industry, including lithography, has weighed heavily in its favor during both the periods of defense preparation and wartime preparation. While some cuts in the use of materials were ordered and others advised in the interest of conservation, to date the industry has not felt considerable pressure from the war agencies. On the contrary, materials have been allocated to the industry, on the basis of its essentiality, from the dwindling supplies of critical metals and chemicals.

Now, however, another shortage has developed in the war production picture which can be reckoned with only by the curtailment of civilian industry. That shortage is manpower, and while the direct effect on the lithographic industry may not have been acute up to the present time, the need for labor in war plants and in the basic industries supplying the raw materials for war production will become increasingly acute, and will bear more heavily on industries such as lithography.

Example of the tightening manpower situation and of its effect on the printing and publishing industry is seen in the War Production Board action restricting operations of Puget Sound pulp mills. Principal factor behind this restriction was shortage of manpower. As a result, the allocation of wood pulp for November prohibits the movement of all grades

of domestic paper pulp to their normal midwestern and eastern markets. The only pulp moving east will be for essential war uses. It is apparent from these actions that the paper industry will have to readjust its use of wood pulp for the duration.

Available manpower is being rapidly depleted as a result of both the draft and the increasing demands of war production. Shortage of labor has been apparent for some time, but will become more of a problem under the plans for stepped-up production.

In view of these factors, the War Production Board has been forced to approach the printing and publishing industry with the objective of effecting some type of curtailment in the industry.

WPB has recognized that the industry performs an important function in wartime, but some specific contribution to the war effort must be made in addition to the services which are now being performed. More specifically, the industry is being asked to bring about some readjustment that will release manpower for war production.

The industry was apprised of the facts through its liaison with WPB—the industry advisory committee representing printers and publishers—at a meeting called by WPB on October 14 in Washington. At this meeting, the industry was requested to bring in a set of recommendations that the WPB can use as a guide in preparing whatever curtailment action is considered necessary.

The following individuals and firms were included in those invited to attend this meeting: Everett Bierman, Charlotte Engraving Co., Charlotte, N. C.; A. H. Brewood, A. H. Brewood, Inc., Washington, D. C.; V. Winfield Challenger, Buyer Ptg. Dept., N. W. Ayer & Sons, Inc., Philadelphia; T. E. Donnelley, Pres., R. R. Donnelley & Sons Co., Inc., Chicago; R. Dunbar Hausauer, Pres., Baker-Jones-Hausauer, Inc., Buffalo; Forbes Lithograph Co., Chelsea, Mass.; Hall Brothers, Inc., Kansas City, Mo.; Alfred R. Knop, Pres., Knop & Brauers, Inc., Milwaukee; Thomas B. Sheridan, Pres., American Bank Stationery Co., Baltimore; Louis Siegel, Pres., The Trade Bindery, Inc., New York; Frank J. Smith, John P. Smith Co., Rochester, N. Y.; J. Homer Winkler, Asst. Mgr. Ace Electrotype Co., Cleveland; Louis H. Traung, Pres. Stecher-Traung Lithograph Corp., San Francisco, Calif.; Elmer G. Voigt, Supt. Western Ptg. & Lithographing Co., Inc., Racine, Wis.; and Harry W. Winsby, Jr., Winsby & Springett Typesetting Co., St. Louis.

IN general, three types of curtailment are possible—(1) concentration of production, (2) a straight percentage cut on production, and (3) a formula to determine essentiality, under which less essential functions of the industry would be either curtailed or eliminated.

It is likely that before any action is taken by WPB with respect to print-

ing and publishing, a cut in paper production will be instituted. The extent of this cut will govern in some degree the type and the severity of restrictions on printing and publishing.

The cut in paper production as proposed by WPB is due to several factors, including labor shortages and the curtailment of newsprint plants in Canada.

Should the proposed cut in paper production be kept at a minimum, it is likely that the action directed against printing and publishing would take the form of a horizontal cut—that is, a straight percentage cut in production. However, if the paper production curtailment is considerable, the other alternatives will probably be taken more seriously into account.

In any event, it appears that for the time being the horizontal cut would be more acceptable.

In the case of concentration of the industry, it is likely that concentration would take the form of selecting firms where business has fallen off appreciably, and concentrating production of such firms in one or several plants.

WPB officials have stated that plants must, where possible, be closed in areas where labor is scarce, or where it is likely to be scarce. This would be another determining factor. Furthermore, in the selection of nucleus plants—plants where production is permitted—consideration must be given to minimizing the burdens on the transportation and power systems.

One of the most serious problems in production concentration is the fate of the closed plants, and the WPB, in cooperation with the Office of Price Administration, is considering ways and means of using these plants in the war effort, as well as providing proper compensation for their operators.

THE concentration plan for industry in general was outlined October 21 by Joseph L. Weiner, Deputy Director, Office of Civilian Supply of the WPB in an address before the Chicago Association of Commerce. He told of the appointment August

26 of a Committee on Concentration of Production by Donald Nelson, to direct and guide the concentration programs.

The following excerpts from Mr. Weiner's talk form an outline of the general procedure which is to be followed:

"The decision as to whether an industry is suitable for concentration precedes any attempt to decide how it should be concentrated. It rests upon a broad survey of such matters as the current and prospective operations of the industry and individual plants in the industry and their estimated capacity; the ability of the industry to operate economically under these conditions; the other products being produced; the convertibility of the industry to war work and the extent to which plants have already been converted; the amount and type of labor employed and the location of plants in relation to labor shortage areas; the use by the industry of transportation facilities, particularly the extent of cross-hauling; the consumption of power and ownership of power facilities, and its use of warehouse facilities. On the basis of this survey the Committee on Concentration of Production decides whether or not production shall be concentrated. If it decides to concentrate, the appropriate Industry Branch is directed to prepare a plan for the Committee's consideration. The views of industry and labor are sought to insure that their special knowledge is brought to bear on the final decisions. But the Government carries responsibility for the final decision.

"The industries in which concentration of production is presently being considered are those whose operations are or will be substantially below capacity but some of whose products are essential in wartime.

"When it is known how much of the industry shall be withdrawn from its previous type of production, the Committee must determine which parts of the industry shall be closed. It must decide the considerations governing which plants shall operate and which shall close. This decision is both the most difficult and the most important element in any concentra-

tion plan. This decision can rarely be made according to any simple rule.

"In the selection of nucleus plants in concentration plans for industries producing essential civilian goods, smaller plants generally will be favored, particularly those located in loose labor markets." (*Areas where labor shortages are not acute—Ed.*)

"If we close plants we must decide what steps should be taken to insure that valuable productive resources shall not be allowed to disintegrate. But we cannot merely pension off everyone in a concentrated industry. We all know that there are plants and organizations in most industries which are not valuable enough to be preserved at any great cost. In these days their greatest value may lie in the scrap they can provide.

"This concentration of production will probably often be accompanied by other measures in themselves necessary and by their nature affecting the operation of concentrated industries. The simplification and standardization of some civilian goods will be necessary to stretch our supplies of materials and sometimes our supplies of labor as far as possible.

"In the meantime I assure you that this task of concentration is being approached with a will to sacrifice nothing without gain to the war effort but to withhold no possible sacrifice that will shorten the war effort by intensifying it now."

Lithographers have been concerned over the effects of concentration on sales, distribution, firm names and brand names, since these factors control advertising to a large extent and therefore control the market for lithographed advertising material. This phase of the concentration plan was discussed October 29 by Harry A. Dinegar before a meeting of Trade Association Executives in New York. Mr. Dinegar, who has first hand knowledge of the way concentration has been carried out in British industry, had this to say on the American outlook:

"Plans for the concentration of the production of civilian-type goods raise questions as to the extent to which we can preserve the good will of closed firms. In some industries good will

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is carried by a brand name; in others it is carried largely by a distributive organization. Here again it is far too soon to pretend to any final solution of the problem. But I can outline the consideration we have in mind.

"The elimination of brands does not seem to be necessary for its own sake. But I foresee cases where it may occur as a by-product of policies essential to economize scarce resources. For instance, where output is standardized on simplified products, manufacturers may wish to suspend their brands or it may be necessary to require them to do so.

"As for the distributive organizations of manufacturers, if firms whose plants are closed obtain a share of the goods produced by the plants that are not, all firms have an opportunity to keep their goods before the public. It can be objected that, if all firms maintain distributive organizations, we fail to concentrate the distributive activities of manufacturers while we concentrate production. But concentration is justified only when directly or indirectly it contributes to the war effort. Workers now engaged in distribution may well be needed. Distributive organizations in some industries carry the burden of repairing and maintaining goods already in the hands of consumers. This service is so obviously important in some industries, such as those that provide for the heating of homes, that it cannot be eliminated. Furthermore, the elimination of the distribution activities of firms whose plants are closed may leave some areas, at least temporarily, without supplies of needed goods. I think it is clear that there is no single rule that can be applied to all cases. Any decision in this matter, which I know is causing widespread concern, must depend partly on the service rendered by the distributive organization and partly on the extent to which any labor or other resources that might be freed by concentrating distributive industries are needed from time to time for the prosecution of the war."

In any event, the WPB has emphasized its desire to hear from the industry, through the industry advisory committee, on possible curtailment

steps. The theory is that the industry should be given the opportunity to propose what steps its members feel would be most effective—both from the viewpoint of the war effort and of the industry.

The industry advisory committee has been requested by WPB to prepare its recommendations, and to report back to the Board, possibly toward the latter part of November. WPB will receive the industry's recommendations and study them, and when a decision has been finally made, whatever curtailment steps are found to be necessary will doubtless be incorporated in a WPB order.

ANOTHER important development was the decision regarding allowable deductions for advertising in the renegotiation of war contracts.

While this has been a controversial issue for some time, the various war agencies have decided that advertising expenditures of corporations substantially engaged in the production of war materials will be "deemed reasonable." This follows the recent announcement by the Treasury Department that income tax deductions are allowable for advertising costs, and it is indicated that a parallel policy will be followed in both instances for determining reasonableness.

The advertising policy was revealed by the Price Adjustment Boards of the War and Navy Departments and the Maritime Commission, and their statement pointed out that they recognize that "it may be necessary for producers to keep their names and the names of their peacetime products before the consuming public in order to maintain their good will and be in a position more effectively to regain their normal markets after the war is won."

The Internal Revenue Bureau, in a statement issued October 24, said that it recognized advertising as "a necessary and legitimate business expense so long as it is not carried to an unreasonable extent or does not become an attempt to avoid proper tax payments." The statement of policy said in part:

"To be deductible, advertising expenditures must be ordinary and necessary and

bear a reasonable relation to the business activities in which the enterprise is engaged. The bureau recognizes that advertising is a necessary and legitimate business expense so long as it is not carried to an unreasonable extent or does not become an attempt to avoid proper tax payments.

"The bureau realizes that it may be necessary for taxpayers now engaged in war production to maintain, through advertising, their trade names and the knowledge of the quality of their products and good will built up over past years, so that when they return to peace-time production their names and the quality of their products will be known to the public.

"In determining whether such expenditures are allowable, cognizance will be taken of (1) the size of the business, (2) the amount of prior advertising budgets, (3) the public patronage reasonable to be expected in the future, (4) the increased cost of the elements entering into the total of advertising expenditures, (5) the introduction of new products and added lines, and (6) buying habits necessitated by war restrictions, by priorities and by the unavailability of many of the raw materials formerly fabricated into the advertised products.

"Reasonable expenses incurred by companies in advertising and advertising technique to speed the war effort among their own employees, and to cut down accidents and unnecessary absences and inefficiency, will be allowed as deductions. Also, reasonable expenditures for advertisements, including the promotion of government objectives in wartime, such as conservation, salvage, or the sale of war bonds, which are signed by the advertiser, will be deductible provided they are reasonable and are not made in an attempt to avoid proper taxation. . . .

"No definite rule for determining what is reasonable in the case of expenditures for advertising can be laid down in advance so as to fit all situations and all classes of taxpayers. In determining whether the amounts are reasonable, it is necessary to take into consideration all the facts and circumstances in each particular case.

"The bureau will consider applications for individual rulings. It is, however, busy with an unusual volume of work, and it is believed that if taxpayers will keep in mind the foregoing general rules, individual rulings will not be necessary except under most unusual circumstances." ★ ★

Join Litho Corps

James E. Brown, former manager of the litho plant of Perrie Press, New York, is now serving with an Air Force lithographic unit stationed at Mitchel Field, N. Y. Thomas Woolford, former partner of the Woolford Reproduction Service, New York, is serving in a similar unit at Mitchel Field.

[illegible]

THOUGHTFUL PLANNING IS A SERVICE TO THE NATION

Multiliths in "Office" Class Despite Industry Protests

AN industry protest against classification of multilith presses under the Services Branch of WPB, rather than under the Printing and Publishing Branch, has been entered by the National Association of Photo-Lithographers in the course of recent weeks, seconded by similar protests from other associations in the graphic arts field. Those filing complaints against present classification of multilith presses under a separate branch from the one having jurisdiction over other lithographic presses included the following trade groups: Label Manufacturers National Association; International Trade Composition Association; Philadelphia Litho Club; Amalgamated Lithographers of America; International Photo Engravers' Union; Graphic Arts Association of Saint Paul; International Printing Pressmen and Assistants' Union; Atlanta Master Printers Club; Memphis Graphic Arts Association; United Typothetae of America; Graphic Arts Association of Grand Rapids; and the Graphic Arts Association of Milwaukee.

The protest of the graphic arts industry seem up to the moment not to have had the desired effect, as the industry's request for a change in jurisdiction was turned down in a letter (dated October 31) from J. M. Scribner, assistant deputy director general for industry operations, War Production Board, addressed to Walter Soderstrom, secretary of the National Association of Photo-Lithographers, as follows:

Dear Mr. Soderstrom:

"Mr. A. I. Henderson has requested that I answer your letter of October 24 in which you raise the subject of the transfer of multilith presses to the Printing and Publishing Branch from the Services Branch.

"A very thorough discussion of this subject was held here not long ago for

the purpose of reviewing this question and determining whether multilith presses should be placed under the jurisdiction of the Printing and Publishing Branch.

"You are no doubt familiar with the manner in which the War Production Board is organized with respect to controls of various end-products. While certain end-products obviously fall within a clearly defined area, certain others occupy a less distinctive position, so that it is not always possible to localize their placement in a branch with complete satisfaction to all concerned.

"It is recognized that multilith presses fall within this latter category, and a sincere attempt was made—in the light of all of the conditions affecting the operations of the War Production Board—to determine the proper branch to maintain jurisdiction over these presses.

"As a result of the facts developed during this discussion, it was thought best to continue the responsibility for this type of equipment in the Services Branch."

The industry's case, as phrased by Mr. Soderstrom, was carried in an open letter to the industry under date of October 19, as follows:

"Multilith equipment is in operation in governmental agencies throughout the country to an amazing extent. It is reported that over 19,000 pieces of reproduction equipment, multilith, multigraph and mimeographs, are in operation in government offices alone. Under a statement of policy laid down by the Joint Committee on Printing in Congress the installation of printing equipment must have their approval. However, under aggressive sales work undertaken by those who manufacture this equipment the multilith has been classified as office equipment. Office equipment, we understand, can be purchased by governmental agencies without the approval of the Joint Committee on Printing.

"The multilith is sold extensively to private printing plants whose operations should be under the same governmental agencies as commercial printing plants, i.e., the Printing and Publishing Branch of the War Production Board. The multilith is a lithographic press and should come under the jurisdiction of the Printing and Publishing Branch of WPB.

"In the event our protest is not accepted and multiliths are continued under the Office Equipment and Supplies Branch, we will want a hearing on this important consideration. This is an opportunity to properly classify multilith equipment. Its installation in governmental offices, the

addition of a folding machine, etc., soon creates demand for more and larger presses."

Typical comments from representatives of various trade groups included the following:

Benjamin J. Robinson, Amalgamated Lithographers of America, "The multilith press is a definite competitive factor competing with job presses and small offset presses to a very considerable degree. . . . It would be extremely unfortunate and unfair, in my opinion, to have the multilith press handled as office equipment while its competitive presses are within the Printing and Publishing Branch. . . . It should be noted that in the recent deliberations of the Committee for the Printing and Publishing Industry under the Wage and Hour Law, the multilith press was included with all other printing, lithographing and gravure production."

Charles Cosby, Label Manufacturers National Association, "If such things as tools and equipment of industry are not to be classified on the basis of the products they produce, we may find some day that special presses to produce labels are under the jurisdiction of the canners or bottlers or some other users of labels. Classification on the basis of size of producing machines is not logical. All equipment to produce any one product should be under the same jurisdiction. Why give one equipment manufacturer a competitive advantage over another."

Wm. E. Lickfield, International Trade Composition Assn., "Multilith equipment has always been printing equipment in our understanding. . . . The fact that the equipment is small, is used in an office, and the company claims it can be operated by comparatively unskilled help, has no bearing on the matter. It is likewise true that an ordinary platen printing press is small, can be operated in an office and by inexperienced help, but it is still doing printing."

George R. Hubbard, Jr., Hubbard, Inc., Bridgeport, Conn., "This machine has been sold quite extensively to private printing plants whose operation should come under the same governmental agencies and governmental control as the printing industry itself. It seems rather strange that the above-mentioned company (Addressograph-Multigraph Corp.) can still manufacture these small lithographic presses and install them in private printing plants . . . especially when these plants are merely duplicating the equipment that is already in the plants of the commercial printers—who in turn are most anxious to keep their equipment busy." ★ ★



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Study Topics Common to Lithogs At Photo-Engravers Convention

THE annual convention of the American Photo-Engravers Association, October 12 to 14, was a "war-time event" in more ways than one. Displays of equipment and materials, a feature of past conventions, were dispensed with in the interest of economy, and the sessions were largely devoted to matters and problems of the immediate moment — governmental regulations (priority ratings, allocations of supplies), conservation of materials, use of old and new processes for greater efficiency, adaptation of photo-engraving equipment to war work, necessity of research, and the possibility of substitute materials. An atmosphere of seriousness and realization of uncertain conditions confronting the industry pervaded the various sessions, which in turn influenced the conviviality and joviality usually experienced during the annual gathering of any organization or group.

The event was the 46th annual convention and was held in Cincinnati at the Netherland Plaza Hotel. It was largely attended in spite of increasing restrictions on travel. Cincinnati was chosen because of its central location and its accessibility to large engraving centers.

All of the officers were reelected, the election of Albert Hoffman as president for his seventh term being the first time that any president of the Association has served for seven consecutive years.

After formal opening of the sessions by Herbert R. Anderson (President, Cincinnati Photo-Engravers Club) and an invocation by the Rev. Dr. Clayton E. Williams, the convention was addressed by the Mayor of Cincinnati, James Garfield Stewart, followed by George W. Rosenthal and Glen O. Glouser.

The first technical paper on the program was that of Everett R. Eaton

(Magazine Photo-Engraving Corp.), who dealt with relief plates for magazine and publication printing, stressing points to keep in mind for accurate reproduction and economy of plate cost. The unit value cost plan of the association was then reviewed by W. B. Lawrence, followed by Al Meyer's (Harold M. Pitman Co.) discourse on how certain practices and stunts have graduated to standard procedure in photomechanical platemaking.

Highlight halftone negatives with the "chromatic halftone screen" of the Printing Arts Research Laboratories formed the topic of Richard C. Glass' address.

The production of copy for color reproduction was dealt with by S. G. Hall (Eastman Kodak Co.), who included among his remarks the Kodak fluorescence color process, based on the employment of copy prepared with fluorescing pigments. The process has some similarity with current fluorescing highlighting methods, but is not a highlight process—rather, it aims at more accurate color reproduction by use of special pigments and the illumination of the copy with ultraviolet light during at least a portion of the exposure.

Next on the program was Theodore Warmbold's (St. Louis Engraving Co.) discussion of the Screenshot process, a procedure especially adapted for outlining of letters (text matter) and double printing of unusual line and halftone effects. Warmbold has been largely responsible for the introduction and development of this process, which is capable of striking results: it would seem to be particularly applicable in photolithography, with the convenience and control afforded by photocomposing machines in the double printing of line and halftone images on sensitized metal.

Harold A. Stewart considered the utility and importance of lens diaphragm controls in obtaining greater uniformity in line and halftone negatives as required in photoengraving. Various types of controls were discussed, the general trend of Stewart's remarks being toward the special computation of such controls for use with film and stripfilm, in view of the increasing popularity of these materials in process galleries.

Another to discuss the subject of color reproduction was Robert C. Kroll, proprietor of a St. Louis photographic studio and long an exponent of color corrected copy as an aid to more faithful color result. Kroll has devised his own processes of color correction and furnishes the trade with photographic prints and negatives from colored copy, from which halftone reproductions can be made involving a decided reduction in the degree of reetching required to produce accurate tone and color values in the final full-color impression.

No convention of photoengravers and printers apparently is complete without the appearance of Lex W. Claybourn (J. W. Clement Co.). Mr. Claybourn gave a varied array of reasons why printing should be performed by letter-press.

Much attention was given to war-time orders and regulations, the discussion inaugurated by the address of A. J. Powers, New York photoengraving executive and who is at present connected with the Industrial Salvage Section, Conservation Division War Production Board.

Coordination of small business with the war effort occupied the attention of Lou E. Holland, a Kansas City photoengraver and now Chairman of the Smaller War Plants Corporation.

An important speaker at the convention was E. W. Palmer, Deputy Chief, Printing and Publishing Branch, War Production Board. Palmer warned photoengravers that their industry must abide by regulations and that unfair practices must be discouraged by all concerned; violation of rules may result in drastic action, particularly unauthorized use

(Continued on page 43)



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MODERN LITHOGRAPHY

Shop Talk

By I. H. Sayre
Technical Editor

Rescreening Halftones

Where the only copy is a screened halftone that must be rescreened for printing, a moiré pattern is frequently encountered. Pattern is caused by the number of lines per inch and the angle of the two screens. Where the job is rescreened by a screen of different ruling from the original, least pattern will be encountered with these combinations.

85 and 133
100 and 150
50 and 100
120 and 175

(Lacking a screen of satisfactory ruling, sometimes it is possible to select a reduction or enlargement which falls within the above contrast.) The poorest combinations are 100 and 110, or 110 and 120, or 100 and 120.

In the case of the 100 and 150 line screens, every two lines of the 100 line screen coincide with every three lines of the 150, but there are 50 dark bands and fifty light ones in every inch so that the pattern is no more obtrusive than a fifty screen illustration. The same is true of 85 and 133 line screens.

The slightest difference between the "copied" and the "copying" screens produces pattern. As small an angle as 1.2° in 100 line screens produces a half inch pattern and so it is practically impossible to set the screen at the same angle. It is safer

to have a wide difference in angle between the two. A forty-five degree angle is the easiest for which to make calculations. To avoid both phase and angle trouble in rescreening, the two ratios should be multiplied together. Here is the formula and an example:

Take the number of the screen ruling to be used for copying, such as 65 line, 100 line, etc., multiply it by the length of the original picture, then divide that sum by the length to which it is to be reduced (if it is to be enlarged, divide by size of en-

largement then multiply by —
16
17

Example: Take a 65 line screen on an original copy 12 inches long to be reduced to 7 inches and rescreened.

$$\frac{12 \times 65}{7} = 111\frac{1}{2};$$

then multiply by —
16
17

which gives 105. For another example take a 100 line halftone 5 inches long to be enlarged to 10 inches and rescreened.

$$\frac{5 \times 100}{10} = \frac{500}{10} = 50;$$

$$50 \times \frac{16}{17} = 66 \text{ plus.}$$

A 65 line screen therefore would be best for rescreening. Likewise a halftone made with 133 line screen reduced from 7 inches to 6 inches and rescreened could best be handled with 150 line screen.

Of course when a halftone is reduced to such an extent that the tones are pulled together almost as a solid, there is very little difficulty encountered in rescreening and most any ruling can be used.

If the ruling of the halftone is not known, it can be determined by laying a rule which has divisions of one-tenth of an inch over the picture, then with a magnifying glass the number of lines in one-tenth of an inch may be counted and this multiplied by 100. To set the screen at a desirable angle for rescreening, a black line may be drawn on the margin or the photograph parallel with the angle at which it is screened. This may be seen on a circular screen and the screen then rotated to the proper angle for rescreening.

Domestic Albumen

Since the supply of Chinese egg albumen has been cut off, we have been forced to use domestic albumen egg scales. The albumen produced by our chickens lacks the viscosity of the Chinese eggs, and in general domestic albumen produces a weak and crumbling coating. Employers should keep this in mind when a batch of weak plates appears. Manufacturers are making every effort to produce a better albumen. Great progress has been made in the development of synthetic resins and plastics. Doubtless a coating will be produced that will be much more efficient than the old egg albumen. One of the most promising alternatives to albumen is polyvinyl alcohol, a synthetic resin of strength and durability. These coatings will lose their ink-receptivity rather soon, but this defect is overcome by blending the polyvinyl alcohol with a polybasic acid such as maleic acid, oxalic acid, citric acid, etc., or a rubber-like material like rubber latex. The solution of polyvinyl alcohol, acid and sensitizer are dried on the plate by whirling and

The proven quality of **LTF** Chemicals *plus* service by Sinclair and Valentine

QUALITY!—SERVICE!—Two words with but a single thought—SATISFACTION PLUS.

Yes! L.T.F. Ready to Use Plate Making Chemicals have proven their ability to save—
TIME, WORRY AND EXPENSE.

We offer our services to prove the above statement. Our trained technicians are always available for demonstration purposes—to make a plate, ready for your press in your own plant. No cost to yourselves and no waste of valuable time.

Write, wire or phone for further information or for a practical demonstration in your own plant. No obligation is involved.

Sinclair and Valentine Co.



Sinclair and Valentine Co. Main Office and Factory: 611 West 129th Street, New York City

Branches: { Albany Boston Cleveland Detroit Kansas City Miami New Orleans
Baltimore Charlotte Dallas Havana Los Angeles Philadelphia
Birmingham Chicago Dayton Jacksonville Seattle New Haven San Francisco

treated in the same manner as albumen.

Another source of trouble is the poor grain now often seen on plates. People who have had to switch from hard abrasives such as aluminum oxide to sand fail to realize that sand pulverizes to mud within five to eight minutes. If sand is being used for regaining, it should be replenished often to obtain a satisfactory grain.

Cellophane Masking Paper

Those who are using red cellophane for layouts or masking will find this cellophane adhesive useful.

Gum Arabic... (14° Baumé) 20 oz.
Glycerin..... 5 oz.
Formaldehyde..... 1/2 oz.

Kodachrome Black & Whites

Panchromatic duplicating negative film may be used in making black and white negatives from Kodachrome originals. The negatives may be made by contact, by projection printing, or by copying. By using a daylight bulb for illumination the contrast may be increased. A diluted positive print developer, or D-76 is used.

Detail in Color Separation

To get more detail in color process negatives, the following split exposures often prove helpful:

Yellow printer: expose with C₅; 2 to 8 percent with K₂

Red Printer: expose with B; 2 to 8 percent with A

Blue Printer: expose with A; 2 to 8 percent with C₅

Contrast of Paper Positives

For maximum contrast, the following formula is recommended:

Water, 125° F. 24 oz.
Metol..... 34 grains
Sodium Sulphite 1 3/4 oz. 10 grs.
Hydroquinone..... 170 grs.
Sodium Carbonate..... 2 3/4 oz.
Potassium Bromide..... 85 grs.
Glycin 170 grs.
Water to make..... 32 oz.

Dilute 1 to 1 with water for a normal solution.

For softness and detail, try a developer containing only Metol, such as the following:

Hot water 125° F. 24 oz.

Metol..... 190 grs.
Sodium Sulphite..... 1 1/4 oz. 10 grs.
Sodium Carbonate... 1 3/4 oz. 10 grs.
Potassium Bromide..... 30 grs.
Water to make..... 32 oz.

For use dilute with 2 parts of water.

Time for development may be divided between these two formulas to secure any desired contrast. Any mono-methyl para-aminophenol sulphate may be used instead of Metol.

PHOTO-ENGRAVERS

(Continued from page 39)

of metals and other materials essential to the national war effort.

The official topic of Walter S. Marx, Jr. (Printing Arts Research Laboratories) was stated to be *Life-line—A Substitute for Etching Metal*, which led some convention visitors to suppose the development and introduction of an actual substitute. Although Marx did refer to the theoretical possibility of a metal substitute, his remarks were mainly devoted to the Fluorographic (highlight) process and the Chromatic Halftone Screen.

E. H. Salmon (Carolina Engraving Co.) had been scheduled to appear ahead of Marx, but a last minute change was made, with the result that Salmon's topic—*Research*—was somewhat anticipated by the California speaker.

A group of speakers next related their experiences in war work, the group consisting of C. G. Rohrich (Akron Engraving Co.), James H. Webb (Southwestern Engraving Co.), Everett Bierman (Charlotte Engraving Co.), Norman M. Mears (Buckbee-Mears Co.) and Willis DeBoer (Universal Engraving & Colorplate Co.). The discussions touched on a number of topics, such as name plate production, templates, work with plastics and other assignments capable of being performed in photo-engraving plants.

The availability of materials and supplies was then discussed by Addison G. Brooks (Le Page's, Inc.), E. W. Schwerin (Photo-Engravers' Zinc and Copper Grinders Associa-

tion), R. H. Kelley (John Royle & Sons) and C. E. Cosby (Mallinckrodt Chemical Works).

One of the final speakers was J. S. Mertle (International Photo-Engravers' Union), whose paper—*Substitute Materials*—was perhaps the longest on the program. Mertle's remarks were distinguished by candor: he pointed out that photo-engraving, like letterpress and lithography, was based on certain inflexible principles which have proven their worth through years of practical application, and that there were no satisfactory substitutes for many of the basic materials used in photomechanical platemaking. Known substitutes in photo-engraving and photo-lithography were reviewed and the subject of plastics for relief etching purposes considered at some length; while acknowledging the utility of plastics for molded printing plates, Mertle's researches, coupled with the opinion of nationally known manufacturers of plastics showed that at the moment there was no plastic available on which photoetching could be performed in a consistently reliable manner.

The concluding speakers of the convention were Edward J. Volz (President, International Photo-Engravers' Union) and Louis Flader, long-time commissioner of the association. Volz's topic was *Industrial Cooperation in Time of War*. Flader discussed the events of the past year and the future problems of the photo-engraving industry.

A timely resolution of the convention was that calling for continued freedom of the press and banning of restrictions on advertising, the adopted resolution offered by Albert W. Sanson, chairman of the resolutions Committee. ★ ★

Discontinue Tray Coolers

The manufacture of tray coolers will be discontinued by the Kellogg Division of American Brake Shoe and Foundry Co., Rochester, N. Y., for the duration of the war or until materials become more readily available, according to an announcement. The division is building a factory and office addition which doubles previously available floor space.



Control, so vital in modern warfare, is important also in the manufacture of lithographic film. Rigid control is exercised through every step in the production of du Pont film, and these superior qualities are the result:



SHARP CONTRAST — Your regular developer produces a high density which contrasts sharply with the crystal-like clarity of the safety base.



SHARP LINES AND DOTS — High resolving power forms excellent halftone dots; it is of equal value for fine line work. Etching may be done by customary methods.



ORTHOCHROMATIC QUALITY — Sensitive to blue, blue-green, green and yellow, permitting use of the usual correction filters for lithographic copy that is colored or stained.



EASE OF HANDLING — The hard, glossy emulsion surface resists scratches. Low water absorption insures quick drying. Flat lying expedites making of set-ups.



LITHOFILM

BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

MODERN LITHOGRAPHY

2000 Attend NYEPA Exhibit



Shown here are three of the offset pieces which won awards in the New York exhibit. At left is a full color menu cover, 9" x 12", which was lithographed for Moore McCormack Steamship Lines by J. P. Grundy; center—an offset presentation for Garden City Publishing Co. produced by Select Printing Co.; right—one of the familiar "Westvaco Inspirations" with an offset cover produced for the West Virginia Pulp and Paper Co. by Rogers-Kellogg-Stillson. All these pieces were in color

INCREASING interest was shown this year in the annual exhibit of lithography and printing, held by the New York Employing Printers Association, and an estimated 2000 attended the three day event October 26-28 at New York's Hotel Commodore. Surpassing the 1941 show in both attendance and in the number of pieces of printing exhibited, the display this year reflected the thinking and feeling of a nation at war. There were notably fewer pieces of printing that could be classified as more novel than useful, there was practically no metallic ink work displayed, and the whole exhibit showed an increasing appreciation for utility. Printing employing the themes of various government war projects was predominant in the showing.

Over 100 awards were given to 45 members of the associations for both offset and letterpress work. Those companies receiving awards are: Allen-Hall Co., Inc.; Ampco Printing Company, Inc.; Arrow Press, Inc.; The Barnes Printing Co., Inc.; Bowne & Co., Inc.; Bryant Press, Inc.; Campbell Press, Inc.; Central Printing Co., Inc.; Central Zone Press, Inc.; The Comet Press, Inc.; Elton T. Cowan Co., Inc.; The Davidson Printing Corp.; Davis, Delaney & Harris, Inc.; Eilert Printing Co., Inc.; Every Ready Label

Corp.; Charles Francis Press, Inc.; The Georgian Press, Inc.; Gordon-Glover-Greene Printing Corp.; J. P. Grundy, Inc.; Guide Printing Co., Inc.—The Kalkhoff Press; The Hegeman Printing Company; Kenilworth Press, Inc.; Richard M. Krause, Inc.; Lobel-Williams; The Longacre Press, Inc.; Marbridge Printing Co., Inc.; McGraw-Phillips Printing Co., Inc.; Ogden Printing Co., Inc.; Pace Press, Inc.; Publishers Printing Co., Inc.; The Read Printing Co., Inc.; Rogers-Kellogg-Stillson, Inc.; Wm. E. Rudge's Sons, Inc.; Frederick W. Schmidt, Inc.; Select Printing Co., Inc.; Steidinger Press, Inc.; Tavern Printing Corp.; Transkrit Corporation; Tri-Arts Press, Inc.; Triggs Color Printing Corp.; Turck & Reinfeld, Inc.; Wardley Printing Corp.; John B. Watkins Co., Inc.; L. F. White Co., Inc., and H. Wolff Book Mfg Co., Inc.

Wakefield Heads Paper Branch

The appointment of Arthur G. Wakefield as chief of the Pulp and Paper Branch of the War Production Board was announced by the board October 14. Mr. Wakefield was formerly manager of the Fox River Paper Corp., Appleton, Wis. He succeeds David J. Winton, who resigned.

Pay Fines for Trust Violation

Sixteen lithographic corporations and 28 individuals were ordered to pay fines totaling \$126,300 in Los Angeles Federal Court September 16, for violation of the Sherman Anti-Trust Act. In an indictment returned a year ago it was charged that through membership in the Graphic Arts Institute they conspired to raise and fix prices and allocate business and territory.

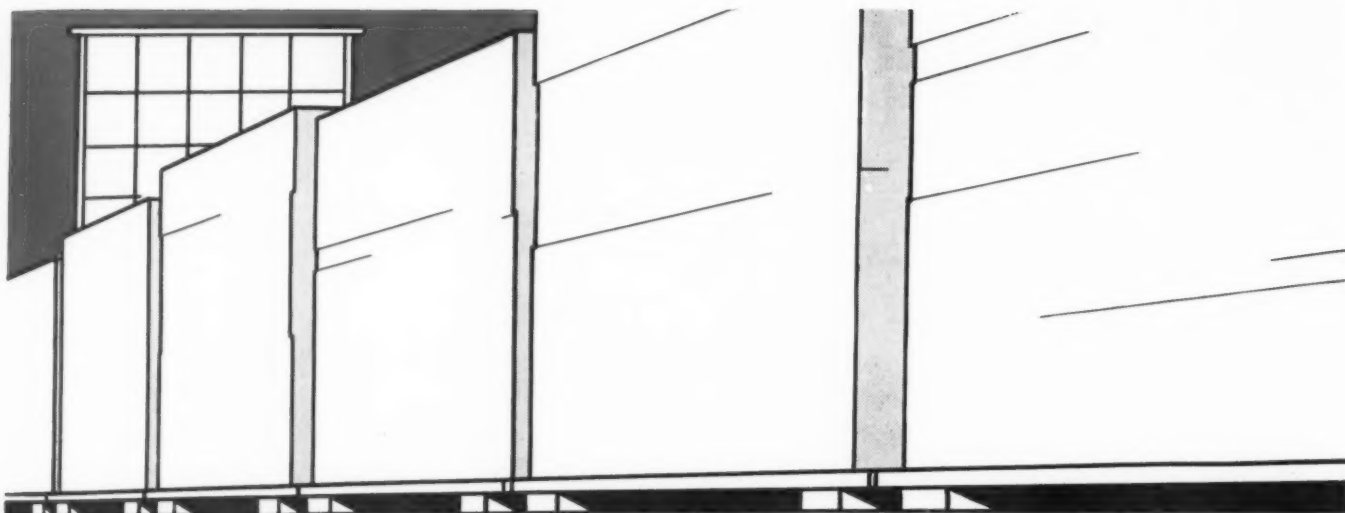
Fines were assessed against the following firms and a number of executives connected with some of them: Schmidt Lithograph Co., San Francisco; Western Lithograph Co., Los Angeles; Stecher-Traung Lithograph Corp., Rochester, N. Y.; H. S. Crocker Co., Inc., San Francisco; Muirson Label Co., Inc., San Jose, Cal.; Schwabacher-Frey Co., San Francisco; U. S. Printing and Lithographing Co. of California, San Francisco; Simpson and Doeller Co., Baltimore; Fibreboard Products, Inc., San Francisco; Louis Roesch Co., San Francisco; Stamps-Pingree-Spieler, Oakland, Cal.; Independent Lithograph Co., San Francisco; L. A. Miller Label Co., San Francisco; Olson Brothers, Inc., San Francisco; Spokane (Wash.) Lithograph Co.; Granville L. Beedle, general secretary, Graphic Arts Institute.

Stays of sentence and two years' probation were granted the Neuner Printing & Lithograph Co., Los Angeles; and U. S. Printing & Lithograph Co., Cincinnati, O.

On September 21, Federal Judge Ben Harrison in Los Angeles assessed fines against the Rocky Mountain Bank Note Co., Denver, Colo.

Eastern Hears OPA Talk

Glenn Mather, Chief of the Printing and Publishing Branch of OPA in the New York area, met with the Eastern Lithographers Association, October 27, and discussed Printing Price Regulation 225 with the 30 members present. The meeting was held at the Aldine Club, New York. Secretary Walter E. Soderstrom announced two new members of the association, National Process Co., and U. S. Printing & Lithographing Co.



KEEP PAPER INVENTORIES UP

Wise printers will realize the importance of maintaining liberal offset paper inventories now. Future sales demands might be greater than the supply of complete paper stocks with which to print the jobs. The complete line of Pacemaker Offset Papers and Brockway Covers are now available in all regular weights, finishes and colors. PACEMAKER Offset has a fine, closed, compact structure, made of strong fibers, and with its extra tub-sizing it will meet any litho-printing problem. BROCKWAY Cover is a perfect companion to PACEMAKER Offset.

Write us on your business letterhead for full information and samples.

GEORGE A. WHITING PAPER COMPANY • MENASHA, WISCONSIN
New York Sales Office and Warehouse • 71 Murray Street



RELIABLE LITHOGRAPHIC PLATE CO., Inc.

The Pioneer Plate Grainers of America

ALL PLATES
INCLUDING THOSE
REGRAINED FOR
MULTILITH
**ARE MARBLE
GRAINED**

“RELIABLE” is far more than just part of our name. It means to our customers that our plates can be depended on to give first-class results because from start to finish the graining is handled by experts of long experience. Our plates are made right to work right—they are reliable!

We carry a full supply of Zinc and Aluminum Sheets for Offset, Rotaprint Presses, in fact for all the lithograph trade.

**MILL
SELECTED
METAL
USED
EXCLUSIVELY**
(MADE IN U.S.A.)

A trial order should “sell” you our services and products.

RELIABLE LITHOGRAPHIC PLATE CO., Inc.

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3-4531

IN AND ABOUT THE TRADE

Graphic Arts Campaign Starts to Roll

THE Graphic Arts Victory Campaign is beginning to roll with many local and regional organizations already operating while others are being set up as fast as possible. Many associations of the graphic arts and advertising industries are co-operating by distributing information to their members. Spearhead of the campaign is the Graphic Arts Victory Campaigns Committee which prepared for permanent organization and active execution of the drive to "direct all printing toward winning the war" in its meeting October 15 at the galleries of the General Printing Ink Corp. in New York.

At this meeting the temporary committee through the chairman, Edson S. Dunbar, presented its working plan to the trade representatives present. Rough layouts of several proposed campaigns were shown, designed to help lithographers and printers to be familiar with the various government war advertising drives and to help them to use these drives as themes for the creation of their customers' advertising material. A plan for conveying information, copy and art ideas to the trade through inserts in the trade press was discussed and approved.

A library of information upon which printers, lithographers, their sales and creative staffs and their advertiser customers may call, was described. Plans were also presented for cooperating with the already functioning Advertising Council which is aiding in the preparation of these government campaigns but is not intended as an agency for placing the information and help in the hands of the producers of commercial advertising material.

General approval was received on the plan of asking each plant to pledge

one dollar per employe and many pledges have already been received. More support was obtained for the pooling of industry talent for the preparation of various trade paper ads, inserts and mailing pieces and several creative printers and lithographers have already offered the services of their art and copy departments. Jim Shanahan, of Art Center Chicago, has also pledged the support of the members of his organization.

Copies of the booklet "How Printing and Lithography Can Help Win the War," which contains complete information of the organization and plans of the campaign, are available from Mr. Dunbar, Crocker-McElwain Co., Holyoke, Mass., or from any of the members of the committee.

Study OPA Report

The price regulation on printing and lithography was studied by members of the New York Photo-Lithographers Association at their meeting November 5 at the Building Trades Club, New York. Glenn Mather, Chief of the Printing and Publishing Branch of OPA in the New York area, discussed the price regulation with special emphasis on Form 325:1 which lithographers must file with OPA in Washington by November 28. A number of questions from the floor were answered by Mr. Mather and many difficult points were cleared up. Walter Soderstrom, executive secretary of the association offered his office's services to members who have trouble in filling out the long detailed form.

Announce War Stamp Christmas Cards

These typical War Stamp Greeting Cards were lithographed by American Offset Corp., New York



The Greeting Card Industry, Inc., New York, announces that it has completed national distribution of a series of War Stamp Christmas Cards to all types of retail outlets. These new cards reproduced in full color

lithography, comprise a series of eight designs. Inside each War Stamp Greeting Card is an album or envelope for War Stamps.

The new cards will retail at 5¢ each on a non-profit basis.



Surely, Swiftly, Safely
—thus moves
EXPERIENCE!

WHEN YOU BUY SORG PAPERS, you're getting the benefit of an unusual paper-making skill which results from 90 years' experience. You're getting the results of year-after-year pioneering in meeting the needs of virtually every kind of business that uses paper. Naturally, this means—

SURE-FOOTED AND SWIFT SOLUTION, of *your* paper problems. For its policy of pioneering the production of better papers for any specified purpose has bred in Sorg personnel a wealth of resourcefulness. To the



men in the Sorg organization, a new paper problem is something to be met and solved. In considering a specialty paper, please remember that—

OUR LABORATORIES ARE AT YOUR SERVICE. We are ideally qualified in personnel, equipment, and available raw materials to develop exactly the paper that will best meet your needs . . . Or, out of our long experience, we will recommend a Sorg stock paper which will give you complete and lasting satisfaction

THE SORG PAPER COMPANY . . . MIDDLETOWN, OHIO

Manufacturers of a wide variety of Fourdrinier and Cylinder papers . . . Specially constructed papers made to individual orders.

STOCK LINES: Equator Offset • Equator Index Bristol • Cream Sorex • White Sorex • No. 1 Jute Document • Buckhide Tag • Valley Cream Post Card • Middletown Post Card. For Converting Use: DBL (Double Bleached Lined); DIP (Dyed-in-Pulp).

CHICAGO OFFICE: Daily News Bldg.
NEW YORK OFFICE: 370 Lexington Ave.
REPRESENTATIVES, BOSTON: C. H. Dodge, 10 High St.
ST. LOUIS: H. E. Bouis, Ambassador Bldg.
LOS ANGELES: N. L. Brinker, 122 S. Central Ave.

Point of Purchase Advertising Institute

Observes Anniversary, Reviews Record

PPOINT of Purchase Advertising Institute, Inc., a fact-finding clearing house of information in the retail store display field, is observing the beginning of its third year this month. In connection with this event, Edward T. Sajous, executive secretary of the institute, reviewed its work and outlined its plans for *Modern Lithography* as follows:

During the early, grim days of shock and bewilderment, there was much of discouragement and anxiety for those of us directly concerned with point of purchase advertising. Rumors and reports had it, for example, that volume display material would go out of existence because of lack of paper, board, chemicals, ink, rubber, zinc, machinery and all other elements essential to production. Happily, the facts about that situation were quickly brought out and the Institute is glad of the service it rendered in helping to bring those facts to light. Again, it began to be something of a vogue among advertisers and others; to mutter, "display is finished. You can't use display material when you haven't any merchandise to sell, can you?" But, it has been possible to find out and make known definite reasons why display has specific jobs to do in retail outlets and that there are functions which it can fulfill even though merchandise is off the shelves.

Today, as we complete our first two years of work, we are not at all discouraged by the conditions with which we are faced. They constitute an opportunity—particularly in this field of merchandising—an opportunity to prove ourselves as an effective merchandising medium, of value in time of emergency and stress as well as in normal times. And as an opportunity, too, to bring the true worth and efficiency of that medium as a vital phase of the total merchandising process, to the attention of advertisers with new force.

While it is true that total volume of display material production has

been reduced and that lithographers and other classifications of the supplying industry have lost display business, we are beginning our third year as the industry's Institute with an expansion of plans calling for adaption of our primary purpose of study and research to wartime problems and needs.

In addition to continuing our quest for factual information and authoritative opinion on such matters as distribution of material, relative values of types of pieces, illustration and copy; possibilities in coordination of display work with sales activity and potentials of store display as an advertising medium—all in relation to war conditions—we are preparing printed material, based upon actual field study, bearing upon questions such as, "Why Use Display When We Have Nothing To Sell?" "What Special Uses Has Display In Helping Preserve Brand-Name Identity?" "Will Dealers Accept and Use Display Which Does An Institutional Job Only For The Manufacturer?" and, "What Is The Attitude of Dealers Toward Patriotic And War-Theme Displays?"

Our Institute's objective is to bring about greater appreciation of the part properly planned point of purchase advertising can play in the merchandising process and, consequently, more interest in the medium on the part of advertisers. We believe we can best attain that objective by getting and sorting out all obtainable information about that medium and making it easily available to all concerned. Because point of purchase advertising is inately and basically a sound, practical, effective merchandising form, we enter our third year of activity now with full confidence that our work will be of real value to both the supplying industry and to the whole advertising field as well, both during these days of the war and afterward when we may be permitted to think and plan and carry on our work in a world at peace.

Display at Color Show

Edwards & Deutsch Lithographing Co., and Colorgraphic, Inc., a subsidiary of the Meyercord Co., both of Chicago, were among exhibitors at Chicago's 2nd annual Color Exposition, staged at Art Center Chicago during October. Edwards & Deutsch displayed a number of posters and distributed for souvenirs a large lithographed reproduction of a Currier & Ives print originally produced for the Hat Corp. of America, which furnishes an example of the ability of the lithographic process to reproduce old art works.

Colorgraphic's exhibit included table mats, posters and cardboard toys decorated by the silk screen process in the company's two plants affiliated with the Meyercord organization.

Eagle Printing Ink Co., New York, exhibited a series of panels showing the popularity of color in numerous commercial commodities. A 32-page survey and two other booklets were distributed by Eagle.

The show was sponsored by the Association for Color Research, whose president is Merle B. Sweet, Chicago representative of Northern Pigment Co., Ltd., Toronto, Canada. Lectures on color were given once each week during the affair, the most popular being concerned with the Ostwald Theory of Color Harmony. Accompanying this was a demonstration of a new color matching device developed in the Chicago color research laboratories of the Container Corp. of America, and designed to make color matching certain and easy.

Issue Pocket Maps

Rand, McNally & Co., Chicago, has issued a new series of handy pocket maps, covering strategic battle areas in Asia and the Near East. Measuring 28 x 21 inches in size and colorfully lithographed, the titles include Mediterranean Lands, Western Pacific, China and Japan, Alaska and Philippine Islands. Another map of the Australian continent, in four colors and 42 x 28 inches in size, when unfolded, includes a compendium of useful information about that country.

Hear Hopf at Litho Club

An eye-witness account of Germany under Adolph Hitler during his rise to power was given for the members of the New York Litho Club at its meeting, October 28 at the Building Trades Club. Speaking on "management under the impact of war," Dr. Harry A. Hopf, head of the Hopf Institute of Management and the H. A. Hopf Co., told of his recent years in Germany and of attending mass meetings and studying the superb showmanship of the German dictator. He then discussed the present American war economy and its effects on business.

About 100 lithographers and supply tradesmen were present at the dinner meeting. Alfred Rossotti, of the Rossotti Litho Co., president of the club, presided, and announced two new members. They were George R. Ruegg, Sweeney Lithograph Co. and Daniel Steinmetz, of the Martin Roman Co.

Commission Collins

James A. Collins, former superintendent of the offset department of Collins, Miller & Hutchings, Inc., Chicago, was commissioned a 2nd Lieutenant in the Army Engineering Corps during October after six months in training at the Fort Belvoir, Va., lithographing unit. Lieut. Collins was immediately transferred to a litho unit at Colorado Springs, Colo., and on his way west stopped off in Chicago to be married. Military ceremonies marked the wedding Oct. 21 at the Church of the Blessed Sacrament. The bride is the former Miss Dorothy Viscosil.

Sanger Addresses Guild

Harold E. Sanger, director of the Chicago School of Printing and Lithography, was guest speaker at the Nov. 6 meeting of the Printers Supplymen's Guild of Chicago, Nov. 6. From his experiences from both the practical and the academic viewpoint, he discussed the vital need for adequate training of apprentices in the graphic arts and recounted the story of what the institution which he heads is doing to provide the basic training for printing craftsmen.

Copifyer Publishes Magazine

The Magazine Plus, published and produced by Copifyer Lithograph Corp., Cleveland, has made its debut as a morale builder and production news medium for the American home



front. *Plus*, the first issue of which was published in September with a limited circulation, has reached a circulation of approximately 100,000 copies of the October issue and November will probably be higher, Allen H. Frost, president of Copifyer told MODERN LITHOGRAPHY. Mr. Frost also stated that no advertising will be carried for the duration.

The magazine is produced by offset lithography in two colors throughout with a four-color cover by James Montgomery Flagg, and the October issue contains 32 pages and covers. It is 8½ x 11 inches in size and is saddlestitched. The October issue carries signed articles by Leon Henderson, OPA chief, and J. Edgar Hoover of the FBI, in addition to a number of other features, all written and edited expressly for war production workers. Other features include picture stories on machine tools, posters, diesel engines, petroleum, barrage balloons and other wartime subjects, news stories of the home front, cartoons, news summaries of world war fronts, several fiction stories, and articles on recreation, movies, beauty, and meal planning.

Plus is sold to war production plants who either have no employee house magazines or who wish to sup-

plement what they have. Copies are distributed through the management free to employees. In some cases the plants may have inserts of their own bound in, bringing localized news or information to the employees.

F. Orlin Tremaine is editor, Wallace H. Campbell is art editor and Andrew Balika is production manager. Editorial offices are maintained at 545 Fifth Avenue, New York.

Midwest NAPL Meets

The Midwest Division of the National Association of Photo-Lithographers devoted its first fall meeting in Chicago Oct. 7 to discussion of the rubber shortage from both the transportation angle and its bearing on press room operations. Paul L. Karns, assistant district manager for the Office of Defense Transportation in Chicago, outlined government rulings on use of motor trucks and explained how delivery trucks must comply in the drive to conserve tires and equipment. H. J. Hunt, of Dayton Rubber Mfg. Co., Dayton, O., presented an illustrated lecture, telling the story of synthetic rubber, as utilized in the graphic arts; showing the effects of atmosphere, temperature and other conditions on blankets and rollers; and suggesting methods for handling and preserving these strategic litho press room materials. Attendance numbered 30 persons.

Machell at Conn. Club

Joseph Machell, director of lithography at Stecher-Traung Lithograph Corp., Rochester, N. Y., will be the speaker at the Connecticut Valley Litho Club meeting Friday, December 4. The dinner meeting, scheduled to begin at 6:30 p.m., will be held at the City Club, Hartford, Conn. Mr. Machell's talk is to begin at 8 p.m.

The speaker has a wide background in multi-color lithography and has conducted technical clinics at a number of the trade's national conventions. He was one of the pioneers in color work on multi-color offset presses. The club has invited all lithographers, both employers and employees.

MODERN LITHOGRAPHY

Safety Talk at Chicago Club

Recognizing the importance of accident prevention campaigns for conserving depleted manpower resources, the Chicago Lithographers Club devoted their Oct. 22 meeting to discussion of accidents and how they hamper the war effort. S. M. Wright, safety director at International Harvester Co.'s McCormick Works, Chicago, who was guest speaker, declared that safety is primarily a responsibility of management. Introducing his remarks, he cited statistics covering the waste of manpower in industrial accidents. In 1941, he said, deaths and injuries of all types resulted in a labor loss equivalent to that of 1,500,000 workers for one year. Financially they cost America's industrial setup \$4,000,000,000.

The attitude of management, Mr. Wright said, is an important factor in accident prevention. Realizing what accidents cost them, plant owners are becoming less tolerant of conditions that cause accidents and a revolution in the accident picture has resulted. Now that new employees are being added, many of them older persons, and in some cases women, who are taking the place of young men, safety hazards have been vastly augmented, the speaker warned. This, he said, stresses the importance of organized and intelligent accident prevention programs in every industrial establishment, small or large.

Factors contributing to accident prevention were discussed, including layout and arrangement of plants, plant housekeeping, machinery guarding, hand tools, electrical hazards, handling materials, prevention of falls, fire prevention and protection, personal protective equipment and sanitation.

Recent social events of the Chicago Litho Club included a "Reciprocity Day" golf meet at Navajo Fields Country Club, Oct. 10. Some fifty lithographers participated.

Saxon Bankrupt

James Geraghty has been appointed receiver in bankruptcy proceedings of Saxon Offset Litho Corp., New York.

Joins Einson-Freeman

Harold Hart, for many years engaged in advertising contest promotions, has joined the creative and sales staff of Einson-Freeman Co., Inc., Long Island City, N. Y., lithographers. For a number of years Mr.



Hart has supplied promotions for various newspapers, including The Los Angeles Times, The Boston Record-American, Pittsburgh Post-Gazette, New York Post, Philadelphia Record, and others. Having served as a practising attorney before entering advertising, he is informed on the legal aspects involved in contests, and he has acted as a consultant on lottery laws and contest management. Mr. Hart will be available to Einson-Freeman clients as a contest consultant.

Contest Closes December 7

Final entries for the Nypen Patriotic Slogan Contest for printers and lithographers must be postmarked prior to midnight, December 7, if they are to be accepted by the contest board of awards, according to an announcement by the New York and Pennsylvania Co., New York, contest sponsors. Any piece of commercial printing—letterheads, posters, direct mail, blotters, menus, or any other, may be entered provided it carries a war bond cut, a Red Cross appeal, a scrap drive message or some other patriotic message or slogan.

Opa Report Due Nov. 28

The report of basic rates and pricing methods as required by the recent printing price regulation is due in the Office of Price Administration in Washington, before November 28, and lithographers in all parts of the country are preparing the six-page legal size form. This report, to be made on OPA Form 325:1 is required of all lithographers or printers "whose total gross sales in 1941 of printed papers and printed paper products and services in connection therewith exceeded \$50,000."

The form is divided into tables covering description of pricing method, creative department, composition, press work, photo-engraving, lithographing, and offset platemaking, press plates, bindery, miscellaneous operations, margin, and discounts and allowances. The form is available from any state or regional OPA office.

In a move to simplify the administration of price control, OPA on October 19 removed the requirement that reports be filed under seal of a notary. It was pointed out that the Emergency Price Control Act makes a false statement to OPA a criminal offense. However, applications for adjustment of ceiling prices and petitions for amendments or exception must still be sworn or affirmed wherever regulations direct.

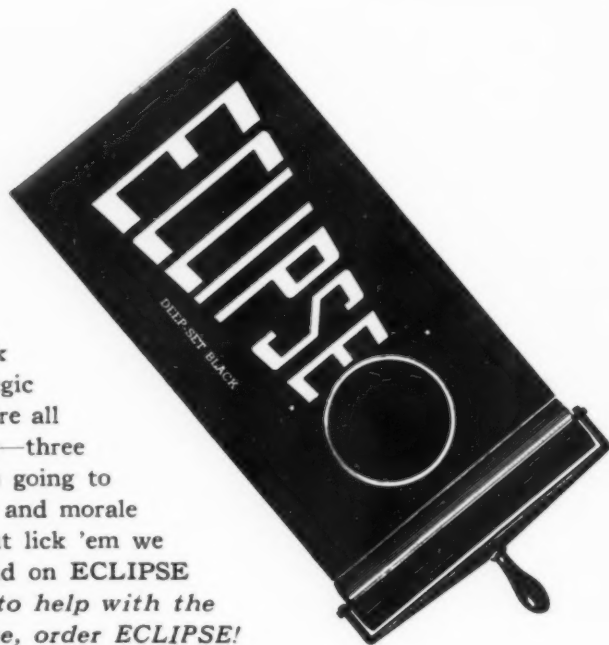
During the past month OPA officials have held a series of meetings with the trade to attempt to clarify the price regulation. Typical of these meetings was one held in Chicago, October 16, where Joseph P. Merriam, in charge of OPA's printing unit presided. About 200 lithographers and printers from Chicago, Milwaukee and other nearby areas attended. At a similar meeting in New York October 14, about 400 attended. Nearly 200 attended the October 15 meeting in Philadelphia.

House Editors to Meet

A meeting of the American Association of Industrial Editors is being held November 16-17 at the Roosevelt Hotel, Pittsburgh. Members of the association are editors of various industrial house organs.

NO SHORTAGE OF GOOD BLACK!

Come what may, we'll always have plenty of black ink, and, of course, plenty of ECLIPSE DEEP-SET BLACK for lithographers. Of course, the ink maker has felt the effect of the war, shortages of strategic materials and restrictions, same as anyone else. We're all in the same boat. We all have a common enemy—three of 'em in fact. You know who they are. And it's going to take a lot of lithography in the form of advertising and morale literature, as well as weapons, to lick 'em, too. But lick 'em we will, you can depend on that! And you can depend on ECLIPSE DEEP-SET BLACK 100 per cent *to be on hand to help with the job. When you want to be sure of performance, order ECLIPSE!*



GAETJENS, BERGER & WIRTH, Inc.

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538 SOUTH CLARK ST., CHICAGO, ILL.

SERVICE PLUS QUALITY!

HAS MADE OUR PLANT THE WORLD'S LARGEST

WE SPECIALIZE IN
SMALL PLATES
ALSO REGRAINING MULTILITH

ZINC and
ALUMINUM PLATES
UNGRAINED—GRAINED—REGRAINED



EXCLUSIVE MANUFACTURERS OF PREPARED PLATES
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4261

Philadelphia Litho Club Elects Officers and Directors, Holds Information Please Quiz

AN "Information Please" program with a "Board of Experts" supported by many questions and opinions from the floor featured the Philadelphia Litho Club dinner meeting at the Poor Richard Club, October 26. Master of Ceremonies F. W. C. French, club secretary, had difficulty in getting the meeting adjourned by 10:30, after nearly three hours of discussion participated in by nearly every one of the 70 members and guests who were present.

The business of the evening covered a wide range, topped by the election of officers and members of the board of governors. Walter A. Kaiser, Edward Stern & Co., who was nominated last month, was approved by the group to head the club for the coming year. Other officers nominated at the September meeting and approved formally were William J. Stevens, Edward Stern & Co., vice president; John Knellwolf, United Lutheran Publishing House, treasurer, and Mr. French, secretary. The latter two were reelected, Mr. Kaiser was formerly vice president, and Mr. Stevens is a new officer. Herman J. Hanselman, Penn Lithographing Co., is the retiring president.

Members elected to the board of governors are: Herman Britz, Graphic Arts Engraving Co.; Anthony Capello, Joseph Hoover & Sons Co.; Milton Davis, Jr., Davis Printing Service; Wilson B. Edgar, Ketterlinus Litho. Mfg. Co.; Theo. E. Greifzu, Sr., Graphic Arts Engraving Co.; Dr. L. F. Rogers, Bond Mfg. Co., Wilmington; Merle Schaff, Dando-Schaff Printing & Pub. Co.; Ernest G. Schau, Crown Can Co.; Elmer Strange, Alpha Litho. Co., Camden; and Engelbert Smith, Crescent Ink & Color Co. Mr. Smith represents the supply trade on the board.

The quiz program was planned to cover presswork, camera, rollers, chemicals, paper, film and ink, and the following were called upon to furnish

answers to questions asked from the floor: Walter Harris, Ketterlinus Lithographic Mfg. Co.; Anthony Capello, Jos. Hoover & Sons Co.; Kenneth Whitecar, Alpha Lithograph Co.; George Stiteler, Ideal Roller & Mfg. Co.; Joseph Winterburg, Phillips & Jacobs; John Davis, Dill & Collins Co.; W. L. Tanner, Agfa Ansco; W. M. Rutherford, Eastman Kodak Co.; and William Bond, Crescent Ink & Color Co.

The club went on record against the office equipment classification of small offset presses used in duplicating work with a resolution addressed to A. I. Henderson, Chief of Industry Operation, Washington. The club asked that such offset presses up to and including 14" x 20" sizes be classified as printing equipment instead of office equipment so that they will come under the jurisdiction of the Joint Congressional Committee on Printing for approval before installation. This resolution was designed to eliminate the competitive advantage held by manufacturers of these small presses by being able to install them as office equipment without coming under any restrictions applying to regular printing equipment.

The next meeting of the club will be Monday, November 23, at the same place.

Publish "Skeleton" Magazine

American Colortype Co., Chicago, has launched a project for the partial syndication of an internal house organ for war production plants, designed to produce short-runs for various plants at low cost. Under a copyrighted program, American Colortype assembles and co-ordinates releases from various Washington agencies, provides covers and illustrative treatment, and furnishes each month a framework in which they print each plant's own personals, management comment, or other material.

The magazines are printed in two

colors, 12 pages, size 8½ x 11. Each user names his own publication, and from the standpoint of the men and women in each plant, the magazine is strictly a company publication. The first issue of the new publication is to be off the press during November. Several industrial organizations, now in war production, are listed among the first users. W. H. Bond, of the American Colortype staff launched the project.

Richards Dons Khaki

Paul Richards, art director for the Meyercord Co., Chicago, entered the army at Camp Grant, Ill., Oct. 22, but was expecting to be transferred to an Officers Training School shortly. Walter Rodak, formerly head of Meyercord's home decorations department, has been in training at an officers school at Atlantic City, N. J., Leonard Knopf, company president, reports.

Hold Hearing on 40c Wage

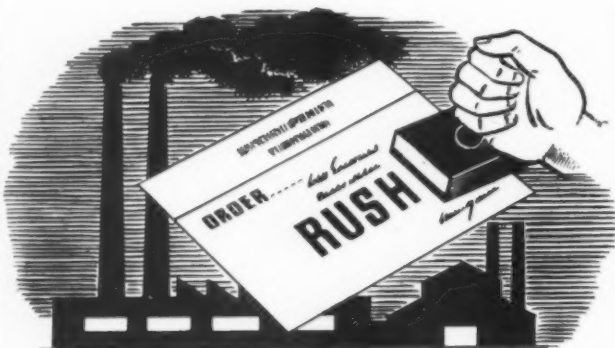
A public hearing on the 40 cents per hour minimum wage proposal made recently by an industry-wide committee was held in New York City November 9, by the Wage and Hour Division of the U. S. Department of Labor. The hearing was planned with the purpose of taking evidence on the proposed order and determining whether it should be approved or disapproved by the Wage and Hour Administrator.

Power in Map Corps

Norman T. Power, former assistant manager of the Western Division of Stecher-Traung Lithograph Corp., San Francisco, has reported for service with the engineers of the Army Map Service Plant in Washington, D.C.

Steinbach Moves

A. D. Steinbach & Sons, lithographing and printing firm of New Haven, Conn. have recently occupied a new building which they purchased some time ago.



**BOOST YOUR OFFICE PRODUCTION
WITH PARSONS MECHANO FORM LEDGER**

Rush! Hurry! Urgent! These are the words most often heard as American Business rolls along in high gear. Delays cannot be tolerated—anywhere along the line.

Help your customers guard against breakdowns in their management machinery by recommending PARSONS MECHANO FORM color control for each department. It insures orders and important instructions going through without a hitch—50% cotton fibers enable Mechano Form Ledger to stand the gaff of thumbing, erasing and rough handling. Eighty years of knowing how produces these better papers at no extra cost.

Get samples of Mechano Form Ledger and Index to show your customers. They'll appreciate its non-glare feature, choice of colors and economy.

*Ask your Paper Merchant
or write direct to the mill for
MECHANO FORM Ledger and Index
Reference Book*

Parsons

PAPER COMPANY • HOLYOKE • MASS.

BONDS
LEDGERS
INDEX

Color or Black & White

HAMMER DRY PLATES and FILM

are the choice of discriminating
craftsmen for negatives and
positives.

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HAMMER PANCHROMATIC PLATES A.H.
SOFT GRADATION
COMMERCIAL
PROCESS
CONTRAST

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HAMMER SUPER PROCESS PLATES A.H.

•
HAMMER OFFSET PLATES A.H.
SPECIAL ORTHO
ORTHO
REGULAR

•
HAMMER OFFSET FILM A.H.

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SPECIAL ORTHO
HALFTONE
REGULAR

•
*SEND for descriptive
booklet Dept. M. L. 9*

HAMMER DRY PLATE & FILM CO.

OHIO AND MIAMI

ST. LOUIS, MO.

Offset Work Plays Prominent Part in Mail Advertising War Conference

OFFSET lithography played a prominent part in the Second War Conference (22nd Annual Meeting) of the Mail Advertising Service Association held at Hotel Statler, Detroit, October 2 and 3, which was attended by members and visitors from 20 states.

Awards were made for the best offset mail work turned out during the past year. The Photo-Offset Exchange cups were awarded to Barton Press, Inc., Newark, N. J. for work on presses larger than 10 x 14; Terminal Letter Co., New York, received the award (its second in two years) for work on presses up to 10 x 14, and Heiden's Mailing Bureau, Seattle, Wash., received first prize in the offset competition for firms which had never before won honors. An addi-

tional award, the Vari-Typer Plaque for offset work, was also won by the Terminal company, for the second successive year.

The following officers were elected for the year 1942-43:

President: Mr. E. N. Mayer, Jr., James Gray, Inc., New York; Vice-President: (re-elected) Mr. Merrill C. Burgess, Burgess-Beckwith, Inc., Minneapolis; Western Vice-President: Mr. Howard M. Rosine, Los Angeles Addressing & Mailing Co., Los Angeles; Canadian Vice-President: Mr. Charles S. Wiggins, Wiggins Systems, Ltd., Winnipeg, Man., Canada; Treasurer: Mr. C. E. Muselman, Paramount Business Service, Allentown, Pa.; and Executive Secretary: Miss Jeannette Robinson, Detroit.

Over 600 Attend New York Direct Mail Meeting

THE old saw "Practice what you preach" is being followed by the Direct Mail Advertising Association as one of the results of its conference held at New York's Roosevelt Hotel, October 16. Unable to elect officers because everybody showed up except enough directors for a quorum, it was decided to hold an election by mail. New officers consequently have not yet been announced.

In the large and varied display of direct mail promotion many that were lithographed were prominent, and a large part of a number of award winning campaigns were produced by the offset method. Because many of the campaigns shown employed lithography, letterpress and gravure in the production of the various pieces, it was impossible to classify them completely.

Of special interest to lithographers was the presentation of the Graphic Arts Victory Campaigns Committee's plan by Edson S. Dunbar, Herbert Kaufman, Charles V. Morris and Ernest Trotter, all members of the executive group. Donald McCaulay, of

the S. D. Warren Co., assisted in the direct mail round table. A total of 631 registered.

Young Lithos to Meet

The November meeting of the Young Lithographers of New York is planned for Wednesday evening November 18 at the Advertising Club, 23 Park Avenue. The meeting was shifted to the third Wednesday of the month in this case because the second Wednesday fell on Armistice Day. Dinner is scheduled to begin at 6:30. Announcement of the program and speaker was to be made prior to the meeting. Secretary Fred Hashagen, National Process Co., stated.

Kindred Heads Research Group

George Kindred, Kindred, MacLean & Co., lithographing firm of Long Island City, N. Y. has just been named chairman of the newly formed Research Committee of Point of Purchase Advertising Institute, Inc. The committee was appointed by D. C. Ozmun of Chicago Cardboard Co., president of the institute.

WPB Discovers "Lifesaver"

The War Production Board is reported to be drafting an order "which would make it virtually mandatory" to use paper or plastic lithographic plates in sizes up to 22 x 29 inches, according to a United Press release from Washington dated October 22. The story described the "discovery" of these plates by the WPB as a "lifesaver" to the industry.

The report stated in part: "Lithographing plates are being made from processed paper and plastics which some experts believe eventually may supplant zinc and aluminum in the offset printing industry, it was learned today.

(This reported WPB order is fully discussed in the editorial on page 17 and in the supply outlook article on page 29 in this issue.)

"The new material, which will effect a considerable saving in production costs, will be made available soon to the 3000 commercial lithographing plants in the country, officials said.

"Production now is restricted to use by the army and government printing agencies. The army has officially adopted the paper plates and is using them in mobile field units. The Coast Guard also has begun experimenting with them, it was understood.

"WPB spokesmen were cautious in their estimates of comparative performance with metal plates."

The despatch did not state who the "experts" or "officials" were who made the various statements.

Joe Carroll Naval Lt.

Joseph Carroll, one of eight sons of John Carroll, president of Sinclair & Carroll Co., ink manufacturers, Chicago and New York, has just been commissioned as a Lieutenant, Senior Grade, in the U. S. Navy. Mr. Carroll has worked out of the Chicago office of the company on sales. He is the third of Mr. Carroll's sons to join the armed forces. Frank Carroll is a Second Lieutenant in an Army anti-aircraft unit, and Tom Carroll is serving as a fighter pilot in the Air Corps.

Want LOWER COST LABEL PRODUCTION?



NEW

PMC

**DIE-CUTTING
MACHINE**

➔ **CUTS UP TO 300,000 LABELS PER HOUR**

Here's speed that means lower cost label production... die-cutting performance that takes up the lag between pressroom and delivery. This machine's accuracy, too, far exceeds that of old-style devices.

➔ **HANDLES LABELS UP TO 6 1/4" SQUARE**

The PMC Die-Cutter will efficiently handle practically every label job, since it will cut any size label from 1" to 6 1/4" square.

➔ **MAKES HOLLOW DIES LAST LONGER**

No special dies are required, while your hollow dies receive extra protection against dulling... assuring more labels per grind.

➔ **EASY TO ADJUST AND OPERATE**

The average hollow die can be locked into register position on the PMC Die-Cutter in less than 10 minutes. Operation is likewise extremely simple.

WRITE TODAY for all the facts concerning this performance-proven machine that is revolutionizing label production.

THE PRINTING MACHINERY COMPANY
436 Commercial Square • Cincinnati, Ohio

★ **≡** *For the Duration*

**THESE VITAL LITHOGRAPHIC NECESSITIES ARE AVAILABLE
DIRECT FROM US OR FROM OUR DEALERS — promptly**

CHAMPION Albumen Concentrate
B.P.B. (Albumen) Solution (Ready-to-use)
JIFFY Developing Ink
JIFFY Heavy Developing Ink (for deep etch)
TRANSOL Developing Ink
LITH-VILO Plate Etch
DR. ZUBER'S PLATE ETCH (dry salts)
IMPERIAL Fountain Solution Concentrate
GUM ARABIC Solution

SOLIO—Self-Gumming Agent, for use in the Fountain
SAV-A-LAC Intensifier (Purple)
GRIPTITE Intensifier, apply direct to Coated Plate
GRAPH—Black Opaque
VELVO—Red Opaque
NEGATIVE STAIN—Black or Red
Liquid TUSCHE
DUMORE Asphaltum—Plate Preserver and Wash-out

MULTILITH OPERATORS — send for our catalogue of preparations
for Plate-Making and Press Operation, etc. — FREE

LITHO CHEMICAL & SUPPLY CO.
63 PARK ROW **NEW YORK, N. Y.**

NEW EQUIPMENT AND BULLETINS

Hanco Offers Chemicals

A. E. Handschy Co., Chicago, manufacturers of printing and offset inks and supplies, is offering two specialized chemical products for offset plates and blankets. "Blanklo" is for repairing low spots in blankets, and instructions state that the material is rubbed into the canvas back of the blanket where low spots are indicated. The product is also used for deep indentations.

"Plasaver," for albumin or deep etch plates is said by the manufacturers to bring back the image to its original form, and plates which are considered blind can be saved to produce additional impressions. The application is made in combination with water and rubbing up black. Additional information is available to *Modern Lithography* readers who write to the company at 538 South Clark St., Chicago.

Warren Issues Booklets

Over 100 typical American war posters are illustrated in the first of a series of booklets issued by the S. D. Warren Co. to show the advertising methods being used by industry to supply incentives for increased war production. Other printed media to be covered by succeeding booklets will include instruction books, pay-envelope enclosures, booklets, and various kinds of leaflets.

The 48 pages of the 8½ x 11 inch booklet were produced by offset lithography on the company's offset enamel stock and furnishes an example of offset work on this type of paper.

In the foreword of the booklet, it is pointed out that the objective of more production must be gained, not by commanding, but by supplying incentives that will induce voluntary action on the part of producers. The material reproduced is typical of these

incentives, and may prove valuable suggestions to lithographers seeking wider wartime markets.

Advance copies of the second of the series "Employee House Organs—Morale Builders for War Production Workers" have also been distributed. Thirty-one of the 50 pages of this 8½ x 11 booklet are devoted to illustrations of covers and inside pages of outstanding house magazines being produced in war production plants. The text material of the booklet deals with the definition and purpose of the house organ, new wartime employee house organs and how to start them, old established organs, suggestions on editorial planning, copy styles, and copy fitting.

These booklets are available from the company at 89 Broad St., Boston.

Issue Photography "Creed"

A current advertisement of the Defender Photo Supply Co., Inc., Rochester, N. Y., which is appearing in national photographic publications as counter displays and as a pocket circular, has as its purpose the clearing up of some of the rumors concerning wartime photography by civilians. Under the heading "Creed . . . for an American with a Camera," it lists a set of rules which, if adhered to, will keep any photographer out of trouble without seriously restricting his photographic efforts.

To Broaden Paper Uses

With the purpose of introducing broader uses of paper, a new advertising campaign has been launched by the Oxford Paper Co. Copy will tell of the company's research and developments aimed at creating papers to substitute for critical materials. Advertisements are being carried in the advertising, printing, packaging and lithographic trade press.

Howard Issues Sales Aid

Howard Paper Mills, Urbana, Ohio, are currently distributing a sales aid designed to help the lithographer sell more business forms by encouraging use of different colors of stock for multiple office copies. The folder is a small 3½ x 6 die-cut piece captioned "Let Color Key Your Business Forms." It introduces Howard's seven wartime colors of stock, reduced from fourteen for the duration, and shows samples of the seven new colors, ivory, pink, canary, green, buff, blue and goldenrod, in addition to white. The back cover is left blank for the lithographers imprint. The papers shown are available in 13, 16 and 20 pound substance weights. Copies of the folder for distribution by individual lithographers are available through the Howard Paper Mills to *ML* readers.

Ideal Roller Issues Folder

A lithographed folder describing the war work being done by them has just been issued by Ideal Roller and Manufacturing Co., Chicago. The folder explains that the trained workmen of the Ideal Co. are being maintained for their war activities while civilian production is being curtailed, and that the engineering and research laboratories are being continued to the fullest extent.

Strathmore Offers War Ideas

Eight suggestions for wartime advertising are described and miniature layouts in several colors are shown in the brochure "How to Dramatize Your Sales Story," just issued by Strathmore Paper Co., West Springfield, Mass. Miniatures of folders and promotion pieces are included on the subjects of security, quality, women, new buying power, winning the war, looking ahead, making it last, and keeping fit.

SERVICE

that helps you make the most of your chemicals

The following three aids should be helpful at a time like this —

The Chemistry of Photography . . .

A working manual that has grown out of our 75 years of experience in making photo-chemicals. More than 100 pages on Development, Fixation, Toning, Reduction, Intensification, and many other subjects. Valuable tables. Price 50c, postpaid.

Free Product Data Units . . .

Each one gives you specific information on an individual chemical. Also discusses storage, care and use of chemicals. If you want more information on the chemicals you use, write for data units, without obligation. Mention chemicals specially in mind.

Specially Trained Field Men . . .

At any time you may have a chemical problem develop, bear in mind that we have men thoroughly trained in lithographic chemistry, with practical graphic arts experience, who stand ready to help you. Feel free to write us.

Mallinckrodt Chemical Works . . . Mallinckrodt St., St. Louis, Mo.

74 Gold Street, New York, N. Y. . . Chicago . . . Philadelphia . . . Los Angeles . . . Montreal



• price 50¢ postpaid anywhere •



YOU'D USE THE SUN

*If it were
PORTABLE
ALWAYS AVAILABLE
CONSTANT IN LIGHT
INTENSITY*

The CARBON ARC is all three and still possesses all the other essential photographic advantages of the SUN

USE NATIONAL WHITE FLAME PHOTOGRAPHIC CARBONS

THE LIGHT OF DAYLIGHT QUALITY

NATIONAL CARBON COMPANY, INC.

Unit of Union Carbide and Carbon Corporation

Carbon Sales Division, Cleveland, Ohio

General Offices: 30 E. 42nd St., New York, N. Y.

Branch Sales Offices: NEW YORK • PITTSBURGH • CHICAGO • ST. LOUIS • SAN FRANCISCO



Advantages

OF CARBON ARC LIGHTING

- 1 No deterioration with age, allowing development of precision technique. Exposure period used today will give same results a year from today.
- 2 A spread of superior photographic illumination over the entire copy board.
- 3 Accuracy of tone reproduction in black and white.
- 4 Daylight quality for realism in color process reproduction.
- 5 Versatility — allowing freedom of technique from soft, smoothly blended tones to bold, sharp contrast.
- 6 Exceptional speed, saving time at the camera.

PITFALLS

(Continued from page 28)

salt is the more soluble of the two but its keeping quality is considerably lower.

Sodium carbonate is available in three forms—crystals (sal Soda), anhydrous (dessicated) and monohydrated. The crystalline form generally contains many impurities but a good grade of this variety is suitable for photographic use. One part of the anhydrous carbonate is equal to 1.17 parts of the monohydrated salt and 2.7 parts of the crystal variety.

Sodium Sulphite comes in crystalline and anhydrous forms. One part of the anhydrous is equal to two parts of the crystals. The crystalline form tends to oxidize to inert sodium sulphate so that its actual strength is an unknown factor. For that reason it is not recommended for photographic use except in emergencies.

IN view of the instability of paraformaldehyde developers, even under ideal conditions, great care should be exercised when mixing such solutions. The following are a few precautions well worth taking:

(a) Particular attention should be paid to the temperature of the water used. The recommended temperature is 90° F. and should never be exceeded. At higher temperatures the unstable paraformaldehyde will decompose thus rendering the solution useless.

(b) Bottles for storing the prepared developer should be kept clean and free from slime and sludge. In addition, the solution should be stored in bottles with little or no airspace. It is wiser to store a gallon of developer in four quart bottles than in a gallon bottle. As some of the solution is poured out of the gallon bottle the ratio of air to liquid becomes progressively greater thereby hastening deterioration of the developer as the volume of liquid decreases. An equal quantity of developer stored in a number of smaller bottles will have a useful life for a longer period.

(c) Avoid the practice of mixing developers in a bottle and shaking the solution to dissolve the chemicals. This practice leads to a premature oxidation of the solution. During the shaking process air is mixed with the water. Air in such intimate contact with the chemicals may cause rapid oxidation of the developing agent. This oxidation produces a dye substance which will stain a negative and render it useless. Even if immediate oxidation does not occur the entrapped air will rapidly cause the developer to spoil.

(d) Do not attempt to save mixing time by making highly concentrated stock solutions. The extent to which a developer may be concentrated is determined by the solubility of the least soluble chemical in the formula and the temperature at which the solution will be stored. As the temperature of water decreases so does its ability to hold chemicals in solution. Thus, as the solution cools off, some of the ingredients may crystallize out. Some operators follow this method and if a portion of the ingredients have crystallized out, they shake up the solution and draw off a quantity of the resulting mixture of dissolved and undissolved chemicals. Of course when the concentrate is diluted the undissolved chemicals will be re-dissolved. The operator therefore feels that his solution is of standard quality. This is a fallacy since the percentage of chemicals crystallized out of solution varies with the temperature of the solution and is further varied by the volume of the liquid remaining. The end result is a developer of uncertain and varying composition and effect.

(e) In some shops the routine demands that a large volume of developer be used in a tray at one time. The developer is not always being used and during such times it is subject to attack by the surface air. The rate of oxidation can be reduced somewhat by providing a piece of waxed paper or cardboard of a size equal to the inner dimensions of the tray. This waxed lid will float on top of the developer and prevent intimate contact between developer surface and the air.

Because of the high contrast and density obtainable with paraformaldehyde developer it is the most widely used solution despite all of its disadvantages. The writer, however, prefers to use a developer of better keeping quality and consistency in action. This solution is ideal for developing contact negatives and positives as well as camera negatives (both line and halftone) from good copy. Only when confronted with the need for obtaining optimum density and contrast from poor copy will it be necessary to return to the paraformaldehyde solution. The following formula has excellent keeping quality both in stock and working solutions.

FORMULA G.D. 190*

Water (125°)	64 ounces
Potassium Metabisulphite	1 ounce
Sodium Sulphite (anhydrous) ..	4 ounces
Hydrochinon	3 ounces
Sodium Carbonate (Monohydrated)	8 ounces
Citric Acid (Crystals)	75 grains
Potassium Bromide	180 grains
Water to Make	1 gallon
Use as is at 65° to 70° F. Time of development will vary with type of film.	

* Gevaert Co. Of America, Inc.

Other manufacturers also suggest similar formulas, namely—Agfa A-81 and Hammer H-62. The writer has had no first-hand experience with the latter formulas but in view of the close similarity the final result should be the same.

(This discussion will be concluded in December issue of MODERN LITHOGRAPHY)★★

LADY LITHOGRAPHERS

(Continued from page 23)

They could watch the trained men and learn enough about stopping and regulating the machines to be of value but there isn't anything else they could do to earn their way during this apprenticeship. And they are not strong enough to load the presses.

"Maybe they could help on the smaller presses, the 17 x 22 inch size, where they could lift the loads without undue strain. But our company's smallest offset press is a 54 inch size



HAVE YOU TRIED THESE SUPERIOR PLATES?

If you are seeking a dependable plate with real color separation value, look no further. These superior ILFORD plates provide constant uniformity, better color separation value and contrast adaptability to all color reproduction processes. Try them.

ILFORD PANCHROMATIC DRY PLATES

NORMAN-WILLETTS

Eastern Sales

SOLE U. S. DISTRIBUTORS

Mid-Western Sales

10 West 33d Street, New York, N.Y.



316 W. Washington St., Chicago, Ill.

YOUR COOPERATION MAKES FOR GOOD INKS

In pressrooms throughout the country Sinclair & Carroll inks are chosen for their all around dependability and good color strength. The responsible leadership and management back of every Sinclair & Carroll ink you buy mean value to you during this period of national emergency over and above the price per pound. Our efforts will be directed toward maintaining tried and true standards. When and where necessary our laboratories will be at work developing new and equivalent products in your behalf. . . . We welcome your cooperation as well as the opportunities you afford us to supply your ink requirements.

SINCLAIR & CARROLL CO., Inc.

LITHO INKS OFFSET

591 ELEVENTH AVENUE, Tel. BRyant 9-3566
NEW YORK CITY

CHICAGO
440 W. Superior St.
Tel. Sup. 3481

LOS ANGELES
417 E. Pico St.
Tel. Prospect 7296

SAN FRANCISCO
345 Battery St.
Tel. Garfield 5834

NEW ORLEANS
211 Decatur St.
Tel. Magnolia 1968

and I can't believe women are powerful enough to be of use there. Something will have to be done, however. We have lost 33 per cent of our men so we are not asleep and we are thinking hard about it."

T. A. Ismond, superintendent of Inland Lithograph Co., said that although they have not yet hired any women, "We may run into it. I've been pondering the advisability of this whole question," he said, "and it does not appear that we could find women capable of functioning efficiently on press work. They are not strong enough to handle stock and it's very certain that they would have to wear slacks around the machines, or we would have some accident compensation bills to meet.

"In smaller shops one main trouble would be to find something else to keep them busy when not required on the presses, but in the large shops that would not be so difficult. We've probably lost the average number of younger men but the older and more experienced men are not shifting. They feel that they are probably doing as well with us as they could do elsewhere and this sense of security as they grow old has helped stabilize our company's labor problem."

WITH increasing recognition being given to the work of women in all industry and with the increasing pinch on manpower in the lithographic industry it's beginning to seem probable that more and more shops will have platemakers called Ruth, cameramen called Margaret and opaquers called Angela. Lithographers' biggest wartime problem may yet be perfume in the fountain solution. ★ ★

WAR POSTERS

(Continued from page 25)

lithographed posters in a world at war.

Many of these posters have been produced in far away places, on Chinese presses, in the offset plants of Australia, in Java before the Japs arrived, in South America, in London

by refugee governments, in the Caribbean islands, in Moscow. The bulk of these posters were obtained



This American poster was rated tops in a recent survey made for *Printers' Ink* among 1,046 war workers. It is typical of American production posters



This is one of the group of poster designs of a series "The Walls Have Ears." Original art work for this series is available free of charge to lithographers for reproduction as posters, stickers, etc. with a customer's name imprinted

through the cooperation of the Inter-Allied Information Center, New York, which is a clearing house for Allied governments. Several came directly from *ML's* friends in foreign lands. A few of them have been lithographed on American presses on order for agencies of foreign governments for use in English-speaking sections of the world.

All together they form an interesting commentary on an important world-wide war role being played by offset lithography. ★ ★

Issue Greeting Card Ceiling

Price ceilings were placed on wholesale and retail sales of Christmas and New Year greeting cards by the Office of Price Administration by the issuance of Amendment 5 to Regulation 210, effective November 7. The amendment does not apply to manufacturers or producers of these items, however, since operations of this group which includes lithographers and printers, are covered by the printing and publishing price ceiling, Regulation 225. The new amendment gives three formulas for computing the prices, with March as a base. In a statement to MODERN LITHOGRAPHY, Glenn Mather, New York Regional Chief of OPA's Printing and Publishing Branch, emphasized that manufacturing prices of these and other seasonal items made by lithographers were still under the printing and publishing price ceiling which was effective September 29.

Issue Ozalid Booklet

A booklet *Simplified Print Making* describing the Ozalid process for the printing and dry development of positive white prints for industrial uses has just been published by the Ozalid Products Div., General Aniline & Film Corp., Johnson City, N. Y. The process is executed in a unit which is complete in itself, according to the booklet, and will turn out a variety of whiteprints in a short time. The use of this method in speeding up industrial and war production is described and various types and models of the machines are cataloged.

Sigma Announces Change

Sigma Photochemical Laboratories, Springfield, Mass., announces that it has taken over the sales of its photochemical products, the exclusive distribution of which was previously given to the Graphic Process & Products Corp., New York, who marketed the merchandise under the name "Nutran." Sigma has severed its connection with Graphic Process & Products Corp., but will continue to deliver the products to the trade under the new trademark of "Sigma."

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LITHOGRAPHIC ABSTRACTS

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Photography and Color Correction

Contrast Images for Making Printing Plates. Francis Lewis Wurzburg, Jr. (to Interchemical Corp.). *U. S. Patent No. 2,294,644* (Sept. 1, 1942). A contrast image having variably-spaced, rectangular dots which vary both in length and in width.

Screen Dot Viewing by Oblique Light. E. T. Wilson and F. J. Tritton. *Process Engravers' Monthly*, 49, No. 584, Aug., 1942, pp. 199-201. Dots of a half-tone negative produced in the camera have a fringe or halo, the width of which gives a measure of the dot quality of the photographic material on which the exposure was made. If the negative is viewed by light passing through the negative obliquely, both the dot and the background appear dark and the fringe is visible as a bright circle. When the negative is printed down the arc lamp prints through the fringe if sufficient exposure is given. If the fringe is not present, however, more flexibility is possible in the control of exposure. A device is described which makes it easier to view the negative by oblique light with a microscope. Photomicrographs made with this device are shown.

Separation Negatives From 35 mm. Kodachrome. James E. Wilson. *American Photography*, 36, No. 10, Oct., 1942, pp. 14-7. Detailed instructions are given for making color separation negatives

from 35-mm. Kodachromes. Light sources and relative positions of the various parts of the optical system are discussed. A holder for the transparency and step wedge, and a temperature controlled developing tray are described. A developer formula is recommended, and a procedure is outlined for determining the correct exposure and developing times.

Color Correction. Wesley T. Hanson, Jr. (to Eastman Kodak Co.). *U. S. Patent No. 2,294,981* (Sept. 8, 1942). In the process of making a color correcting universal mask from and for register with a colored original made up of superimposed subtractive color images, when reproducing the original by a process requiring fixed amounts of correction for the color of each of said images, the steps of exposing a sensitive layer through the original by substantially monochromatic light whose wave length is that at which the relative absorptions of the coloring materials constituting said images are proportional to the relative amounts of correction required for these images, and developing the layer to the correcting gamma corresponding to the undesired absorptions.

Transmission Densitometer. *Review of Scientific Instruments*, 13, No. 7, July, 1942, pp. 301-2. The Agfa Ansco Research Laboratories have developed a new densitometer designed especially for measuring transmission of photographic films. Because of the logarithmic relationship existing between grid current and plate current in this circuit, a linear density scale is achieved which covers a density range 0-3.0. Accuracy of ± 0.005 between 0 and 1.0, ± 0.01 from 1 to 2.0, and ± 0.02 from 2.0 to 3.0 is claimed, and the stability is also within these limits. The measuring arm is separable and may be used as an exploring element in applications where it is desired to measure illumination on a logarithmic scale.

Color Correction. Merrill W. Seymour (to Eastman Kodak Co.). *U. S. Patent No. 2,289,738* (July 14, 1942). In a process for the reproduction of a multi-colored original, the method of making corrected color separation positives which comprises successively positioning more than three photo-sensitive layers on separate supports in printing relation to the original, three of the layers being of normal negative materials and at least one of the layers being of auto-positive material, exposing said three of the layers respectively to the primary colors from the original, exposing said auto-positive layer to light from the original, the color of the light corresponding to that re-

quired for color correction by masking of at least one of the primary color layers, processing substantially simultaneously the three primary color layers to negatives and the auto-positive layer to a positive, masking the negative consisting of said one of the primary color layers by the latter positive and making positives from the three negatives as masked.

Planographic Printing Surfaces and Plate Preparation

Method of Producing Photo-Mechanical Printing Plates. H. M. Cartwright, Alfred Haigh, and Frank H. Smith. *British Patent No. 545,942*. This invention relates to a method of producing a flat or cylindrical printing form by coating a metal or other suitable surface composed, for instance, of rubber, celluloid, glass, plastics, etc., with a gelatin photographic emulsion containing a light-sensitive silver halide, and subsequently exposing to light in a camera or by photographic contact printing, developing in a known photographic manner, and converting the photographic image to form an image consisting essentially of gelatin upon the base. The claim also covers a photographic emulsion containing a hardening agent, such as chrome alum. (*British and Colonial Printer and Stationer*, 131, No. 720, August 6, 1942, p. 52.)

Printing Plate. Francis Lewis Wurzburg, Jr. (to Interchemical Corporation). *U. S. Patent No. 2,294,645* (September 1, 1942). A printing plate having variably-spaced, rectangular printing areas which vary both in length and in width.

Photo-Lithography — Albumin Coating Solution. A. Haigh and H. M. Cartwright. *Process Engravers' Monthly*, 49, No. 584, Aug., 1942, pp. 218-9. A formula for and directions for the preparation of an albumin coating solution are given. The addition of fatty acid as an emulsified grease and the addition of fish glue to the albumin solution have been advocated, but the authors do not believe that either of these additions has any value. The use of casein as a substitute for albumin is discussed and a formula for a coating solution using casein is given. Polyvinyl alcohol as a coating solution is also briefly discussed.

Photo Plates. "Inker." *Modern Lithographer and Offset Printer*, 38, No. 7, July, 1942, pp. 78, 80. Care and common sense make the difference between a good pressman and a poor one. The image on photo-lithographic plates is a thin fragile film of albumin and should be treated as such, if long runs are to be realized. The four main causes of an

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albumin image breaking down are: (1) faulty pressure setting, (2) incorrect roller setting, (3) local etching, and (4) letting the plate stand too long without gumming up. Each of these causes is briefly discussed.

Printing Plate Preparation. William H. Wood (to Harris-Seybold-Potter Company). *U. S. Patent No. 2,294,944* (Sept. 8, 1942). In the treatment of lithographic printing plates after formation of the printing image, before printing applying to the non-image areas of the plate an aqueous solution of mesquite gum with smaller amounts of a soluble bichromate and phosphoric acid.

Equipment and Materials

Water Mechanism Care of Offset Presses. George H. Williams. *American Pressman*, July, 1942, p. 39. Many troubles that are caused by the dampeners are nothing in the world but carelessness on the part of the pressman. A discussion is given on the covering, cleaning and care of the water mechanism of offset presses. Dampening rollers must have a true cylindrical surface, or they will not carry an even amount of water. Low spots of steel cores may be brought up to shape with waterproof adhesive tape, a piece of thin cloth sewed around, or coatings of shellac. In extreme cases cores may be ground to true surface. The covering of rollers with molleton is described in detail. To clean dampeners, place in a sink or trough, so that they will turn. Soak with water, then with gasoline, and finally scrape the nap with an ink knife. Water vibrators should have any ink washed off with gasoline, and then scrubbed with pumice stone, finally coating with the etch. (*Share Your Knowledge Review*, 23, No. 10, August, 1942, p. 12.)

Good Rollers for Clean Printing—How to Insure Them. John Stark. *Lithographers' Journal*, 27, No. 6, Sept., 1942, p. 261. Composition rollers should be cleaned every day so that no dried ink film may accumulate. If a film does accumulate over a period of time it is apt to crack and if not removed will cause the roller itself to crack. Such a film may be removed by softening it with alcohol and then using No. 00 sandpaper. Low temperatures make the composition rollers brittle and if handled immediately after being received during cold weather, they are apt to break. Besides poor rollers, other causes of scumming are: incorrectly set rollers, too much water, stopping the press and restarting without gumming up the plate, and, in a few rare cases, the paper.

Sheet Registering Mechanism for Printing Machines. William K. Eckhard (to R. Hoe & Co., Inc.). *U. S. Patent No. 2,286,032* (June 9, 1942). In a sheet registering mechanism for a printing machine, a rotatable cylinder adapted to receive sheets, sheet registering members carried by the cylinder and by which sheets delivered thereto are registered, means to take sheets from the

cylinder, and means to move the sheet registering members out of sheet engaged position previous to movement of the sheet taking means from the cylinder.

Paper and Ink

Color Strength and Ink Distribution. Charles F. Geese. *National Lithographer*, 49, No. 9, Sept., 1942, p. 30. An ink should always be a little stronger in color than the copy it is expected to reproduce. If a full-strength color is used to obtain a light shade, too little film protection of the plate against the ink will be used and there will be no ink fountain etch. Pat-outs should be used to test whether or not the ink has the required color strength. Laketime is usually used to reduce color strength but if much is needed, a little No. 5 varnish should be added to give length.

Offset Coated. Robert P. Long. *Modern Lithography*, 10, No. 9, Sept., 1942, pp. 24-8, 50. This article is a discussion of the advantages and disadvantages of using coated-two-sides paper for offset lithography. Pro and con opinions from various people are given. A brief history of the development of coated-two-sides litho papers is presented. One of the chief problems in printing this kind of paper is offsetting, because in order to make the coating withstand the water and acid of the fountain solution and the 100% impression of the offset press, it must be so hard that it tends to retard penetration of the ink. A summary of printing suggestions for running coated-two-sides paper is given.

Printing Ink and Short Varnish. Francis J. Curtis (to Monsanto Chemical Co.). *U. S. Patent No. 2,291,293* (July 28, 1942). A substantially water-free printing ink comprising a printing ink vehicle and a thickening agent including a performed gel originally prepared in an aqueous swelling medium and containing as the continuous phase the liquid constituting the vehicle of said ink, said gel being substantially free of the original swelling medium and having substantially the gel structure as originally formed and being present in amounts sufficient to materially "shorten" the ink.

A Test for Printability. F. A. Weymouth. *American Ink Maker*, 20: No. 7, July, 1942, pp. 27-9; No. 8, Aug., 1942, pp. 25-6, 43. A method of testing printability of paper which uses an engraver's proof press is described. Detailed instructions are given concerning the preparation of the press for testing. Ideal or base rollers covered with a thin glue coating are recommended. The method of testing, using both a solid plate and a half-tone plate, is described. The following characteristics are judged by comparison of the test sample and the standard after they have been printed on the proof press: (1) ease of impression or coverage, (2) blottability, (3) evenness and rapidity of ink absorption, (4) degree of offset, (5) relative show-through and strike-through, and (6) picking.

Printing Ink and Printed Paper. Improved Opacity Tests. A. G. Arend. *British Printer*, 54, No. 322, 132 (1941); *Review of Current Literature Relating to the Paint, Colour, Varnish, and Allied Industries*, 15, 71 (1942). A review of testing methods for printed and unprinted paper. (*Chemical Abstracts*, 36, No. 18, Sept. 20, 1942, p. 5659.)

Evaluating Coated (Paper) Bodystocks. J. J. Friel. *Paper Mill News*, 64, No. 49, 50, 52, 54, 56 (1941). The importance of uniform basis weight and air permeability in body paper for coating is stressed. (*Chemical Abstracts*, 36, No. 18, Sept. 20, 1942, p. 5647.)

General

Shop Talk. I. H. Sayre. *Modern Lithography*, 10, No. 9, Sept., 1942, pp. 43-4. Various suggestions for shop routine are given. If a mistake is found in a negative during development, the negative should be left in the developer until it becomes solid black all over. After being sensitized with ammonium dichromate, such a film can be used to make a contact positive. Formulas and procedure are given. Suggestions on using casein as a substitute for albumin are presented. A way of making dye or opaque "lay" on a negative, a formula for a blanket wash, and a method of map making are described. Micro copying is suggested as a source of business for photo-lithographers.

Preparing for Contingencies. A. C. Austin. *National Lithographer*, 49, No. 9, Sept., 1942, p. 26. Although metal is scarce there will probably be enough to carry the lithographic industry through the war. Unnecessary graining should be avoided. The Technical Foundation's process of removing the greasy image from aluminum plates without injuring the grain should be used. Paper base plates and plastic plates may be developed which will take care of the metal situation entirely. Most chemicals are still available. A formula is given for a reducer to take the place of Farmer's reducer if the chemicals in the latter should become unobtainable. White distilled vinegar is suggested as a substitute for acetic acid.

Miscellaneous

Synthetic Drying Oils. Herbert Jay Wolfe. *American Ink Maker*, 20, No. 9, Sept., 1942, pp. 39-42, 67, 69. It has been found that chinawood oil owes its excellent drying and film properties to the presence of conjugated double bonds in the fatty acid molecules. Methods of introducing conjugated double bonds into the molecules of slower drying oils fall into three classes: (1) conversion of isolated double bonds in the fatty acid to conjugated bonds, (2) dehydration of hydroxy acids in oils which contain them, and (3) dehydrogenation of oils by the process of halogenation followed by dehydrohalogenation. Each method is discussed. Various other types of syn-

(Continued on page 69)

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Comprehensive pressroom tests indicate that Cumberland Offset exhibits a minimum of stretch or shrinkage under changing atmospheric conditions. Tendencies toward curling and "cockling" are held to a minimum—even under extreme conditions of relative humidity.

Because of its flat-lying properties Cumberland Offset is a "production" sheet which may be run at maximum press speeds.

Write for free booklet—"How Will It Print by Offset"

S. D. WARREN COMPANY • 89 BROAD STREET, BOSTON

Better Paper  Better Printing
Printing Papers

CLASSIFIED

All classified advertisements will be charged for at the rate of ten cents per word, \$2.00 minimum, except those of individuals seeking employment, where the rate is five cents per word, \$1.00 minimum. Address all replies to Classified Advertisements with Box Number, care of Modern Lithography, 254 W. 31st St., New York. Closing date: 1st of month.

For Sale:

24" Goerz Artar lens and prism, like new, \$500; 30" Goerz Artar lens, excellent condition \$350; 23½" 133 line Levy Standard screen, like new \$575; 23½" 120 line Levy Standard screen, like new \$475. E. T. Sullbarger Company, 538 South Clark Street, Chicago.

For Sale:

Small (2 or 3 man) Job Plant. New Harris LSB. Excellent Business. Reason: Health. North Central state. Address Box #831, c/o MODERN LITHOGRAPHY.

For Sale:

25 Amp., 110 Volt Twin Arc Printing Lamp . . . \$35. Gelb Overhead Printing Lamp . . . \$110. 31" Levy Darkroom Camera-24" Levy Camera with lenses new 21" x 24" Plate Whirler . . . \$165. New 22" x 28" Vacuum Printing Frame. Macbeth Camera Lamps. Singer Engineering Company, Complete Plate Making Equipment, 242 Mott Street, New York.

For Sale:

New Vacuum Printing Frame with Rubber Plate size 55" x 82". Available without priority. \$525. FOB Detroit. David C. Brown Co., Wisconsin Avenue, Detroit.

Situation Wanted:

Harris press operator, 3 years experience, 24 years old, draft exempt. Seeking location in New York vicinity. Address Box #830, c/o MODERN LITHOGRAPHY.

Situation Wanted:

Offset stripper and artist, wet plate, strip film, lettering and air-brush, process experience. Address Box #829, c/o MODERN LITHOGRAPHY.

Wanted:

Line up table, size 26" x 36" or larger. Opaquing tables, size 26" x 36" or larger. Address Box #832, c/o MODERN LITHOGRAPHY.

Wanted:

Experienced photo composing machine operator. Permanent well-paying job. State past experience and complete qualifications. Address Box #833, c/o MODERN LITHOGRAPHY.

Miscellaneous:

"Don't throw away your old obsolete Offset or Multilith blankets. Use "Resilio" and "bring 'em back alive." Restores blind spots and brings back resistance to old blankets. Keeps new blankets in good condition. Graphic Arts Laboratories, P. O. Box 365 Hamilton, Ohio.

Evans Joins Chicago Firm

Collins, Miller & Hutchings, Inc., Chicago photo-engravers and lithographers, have announced appointment of Vernon K. Evans as superintendent of their offset department. Mr. Evans, who began his services in September, was formerly associated with North State Publishing Co., Hammond, Ind. He is known for his activity in lithographic technology and from his appearances as a speaker at lithographers' meetings.

Litho Processes Useful in War

A method for the utilization of litho processes and idle presses for direct war production is described in an article by W. H. Wood, in the August and September issues of *Harris Impressions*, published by the Harris,

Seybold, Potter Co. The author states: "For those plants properly equipped with suitable equipment and a competent staff, photo template making, guide patterns for flame cutting and etched metal instruction sheets offer a way to serve our war effort in a direct manner and at the same time profitably maintain shop operation."

Fell Succeeds Blomquist

D. B. Fell, formerly associated with the Miehle Printing Press and Manufacturing Company of Chicago, has been appointed Chief of the Machinery and Equipment Section of the Printing and Publishing Branch, succeeding Herbert W. Blomquist, it was announced October 29 by Deputy Chief E. W. Palmer. Mr. Blomquist resigned to take a position with the Smaller War Plants Corporation.

Bellack in Staff School

Richard F. Bellack, executive vice president and general manager of the Fox River Paper Corp., Neenah, Wis., is one of 83 business and professional men who entered the U. S. Army's Command and General Staff School at Fort Leavenworth, Kan. The course is designed to enable them to co-operate more efficiently with the Army in furthering the war.

Smithsonian Wants Posters

The Lithographers National Association has received a request from R. P. Tolman, curator of the Division of Graphic Arts, Smithsonian Institution, Washington, for samples of war posters for documentary and exhibition purposes. Organizations producing such posters will be given full credit when the material is displayed, Mr. Tolman stated, and they will go into the records in the donor's name.

Bruns Joins Photo Press

G. H. Bruns, formerly with I. S. Berlin Printing and Lithographing Co., Chicago, has entered the services of Photo Press, Inc., same city, where he is serving as assistant to President Edward Chalifoux.



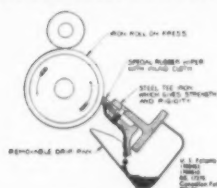
Color process plates, black and whites, highlights, originals for hand transfer, posters, crayon color plates, line and halftone negatives or positives for machine transfer, or photo-composed press plates, albumen or deep etch.

WRITE • WIRE • PHONE

TOLEDO • NEW YORK • CHICAGO • DETROIT

Graphic Arts Corporation
OF OHIO

INTERNATIONAL PRESS CLEANERS



are daily demonstrating their efficiency in increasing Output and Lowering Production Costs

This Is Our Method of Removing Ink From Press
We invite you to take advantage of our thirty day trial offer. If interested write and let us know the size and make of your press.

INTERNATIONAL PRESS CLEANER & MFG. CO.
112 Hamilton Ave. Cleveland, O.

★ *When* MANPOWER SHORTAGES ★ UPSET YOUR PRODUCTION SCHEDULES

when you require additional camera or plate making facilities, and when you are seeking the best in

★ OFFSET PLATES and NEGATIVES

Nelson Associates' complete preparation facilities continue to be at your service

★ Nelson Associates Incorporated

1959 EAST JEFFERSON AVENUE, DETROIT, MICHIGAN

Complete Preparation for Offset Lithography

★ COMMERCIAL ART, COMPOSITION, PHOTO LETTERING, OFFSET PLATES

**LITHO
PLATES**

ZINC and ALUMINUM PLATES UNGRAINED—GRAINED—REGRAINED

grained correctly to your specifications for your special requirements.

We are manufacturers of METAL SHEETS for ROTAPRINT Machines, also square edge plates for Multilith Presses.

THE PHOTO LITHO PLATE GRAINING COMPANY

1207-15 S. Highland Ave.

BALTIMORE, MD

THERE ARE DEPENDABLE

MERCK PRODUCTS

FOR EVERY CHEMICAL NEED OF THE
PHOTOLITHOGRAPHER

MERCK & CO. Inc. *Manufacturing Chemists* RAHWAY, N. J.

New York • Philadelphia • St. Louis

In Canada: Merck & Co. Ltd., Montreal and Toronto

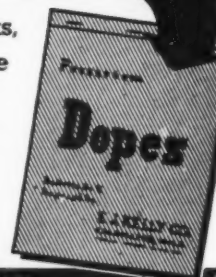
Free! EVERY PRESSMAN WANTS THIS BOOKLET

Helpful hints about handling inks, compounds, driers, etc. Valuable information prepared by experts. Write for it on your firm letterhead.

It's FREE!

E. J. KELLY CO.

1829 N. Pitcher St. Kalamazoo, Michigan



MORE PRESSROOM SPEED

with *Craftsman Offset Precision Tables*

Designed for the offset printer, these tables provide every facility for the platemaker on all preparatory operations—copy, multiple and color layouts, combination and cross rule forms, masking and opa-ving, register and mechanical check-up—all with speed and precision. They are self-contained and fully equipped to save time, space, and labor on all these jobs. When our present materials are exhausted we must discontinue manufacture for the duration. On bona fide orders we will defer delivery for a limited time. Write for information.

CRAFTSMAN LINE-UP TABLE CORP.

49-59 River Street

Waltham, Mass.

LaMOTTE pH CONTROL METHODS IN THE PLATE AND PRESS ROOMS



LaMOTTE BLOCK COMPARATOR

This compact unit for determining pH of solutions is complete with pH color standards—indicator solutions—marked test tubes and instruction booklet.

Illustrated folder sent on request

LaMotte pH Service offers simple and economical pH apparatus, indicator solutions, etc., for use in determining the pH of fountain solutions, etc.

LaMOTTE CHEMICAL PRODUCTS CO.

Dept. R., Towson, Baltimore, Md.

LITHO ABSTRACTS

(Continued from page 65)

thetically improved drying oils are also discussed.

New Multicolor Process. Anonymous. *Photo-Engravers' Bulletin*, 32, No. 2, Sept., 1942, pp. 65-6.

Improvements in Offset Printing. Alfred Edels. *British Patent* No. 546,309. (*British and Colonial Printer and Stationer*, 131, No. 724, Sept. 3, 1942, p. 88.)

LEGAL NOTICE

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACTS OF CONGRESS OF AUGUST 24, 1912, AND MARCH 3, 1933

Of Modern Lithography, published monthly at Philadelphia, Pa., for October 1, 1942. State of Pennsylvania (ss. County of Philadelphia) ss.

Before me, a notary public in and for the State and county aforesaid, personally appeared Wayne E. Dorland, who, having been duly sworn according to law, deposes and says that he is the Editor of the Modern Lithography and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Photo-Lithographer, Inc., 1309 Noble St., Philadelphia, Pa. Editor, Wayne E. Dorland, 254 W. 31st St., N. Y. C., Managing Editor, Robert P. Long, Business Manager, Wayne E. Dorland, 254 W. 31st St., N. Y. C.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.) Photo-Lithographer, Inc., 1309 Noble St., Philadelphia, Pa. Ira P. MacNair, 254 W. 31st St., N. Y. C. Grant A. Dorland, 254 W. 31st St., N. Y. C. Wayne E. Dorland, 254 W. 31st St., N. Y. C.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner;—and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect, in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the twelve months preceding the date shown above is. (This information is required from daily publications only.)

WAYNE E. DORLAND,
Editor.

Sworn to and subscribed before me this 21st day of September, 1942.

[Seal] SAMUEL NEWMARK,
Notary Public, Nassau County Clerk's No. 1203, New York County Clerk's No. 166.
(My commission expires March 30, 1944.)

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(The Advertisers' Index has been carefully checked but no responsibility can be assumed for any omission.)



"Calm down, Cuthbert, the worst shortage is yet to come,—a worse shortage of Customers!"

...what, no customers?

BAD as it was to be all sold up and have nothing further to offer your customers, infinitely worse is to have lots of goods and no customers. And this can happen to anybody, large or small. The time-tested method of insuring against a future "no customer" situation, is regular advertising in representative trade papers.

Now, in the field of lithography, the best safeguard against a "no customer" future is, in our opinion, regular advertising in

MODERN LITHOGRAPHY

254 WEST 31st STREET

NEW YORK

More Auto Tags Use Decals

Use of decalcomania license stamps as a substitute for steel auto license tags is growing in popularity. The Meyercord Co., Chicago, which is said to have originated the idea and has developed numerous protective features for the stamps, has been working on contracts for ten states, six of which were added since July to the original four that first adopted the stamps. The complete list, supplied by President Leonard Knopf of Meyercord, includes Alabama, Arizona, Idaho, Iowa, Maine, New Mexico, North Dakota, Utah, Wisconsin and the Territory of Hawaii. Two other states, Oregon and Washington, will also use decal license stamps on 1943 motor cars, production of which is understood to be handled by west coast decal makers.

Offer 1942-'43 Apple Award

Lithographers will again have a chance to compete for the Annual Apple Advertising Award which was won last year by A & P Tea Co. with a promotion produced by Tooker Litho. Co., of New York, according to an announcement by the New York and New England Apple Institute. A descriptive brochure is being mailed from the office of the Apple Institute, 154 Nassau Street, New York City in which rules of the contest and general information are described.

Illustrate Optak Process

The "Optak" lithographic process for reproductions of halftones up to 400 line screen is described in the latest issue of *The Depictor*, published and printed by Edward Stern & Co., Philadelphia lithographers. The process is a development of the unetched gelatine plate method, and was used for the entire production of this issue of the house organ. Illustrations are shown in 200, 300, and 400 line screens. The entire issue is devoted to the promotion of this process for production of advertising.

MODERN LITHOGRAPHY



WIDE LATITUDE

THE wider the latitude of the film you use, the better for you, provided other characteristics are not sacrificed.

All Agfa Ansco Reprolith Films have unusually wide latitude — enabling you to obtain uniform negatives from varying types of copy where the ideal exposure cannot always be determined with accuracy.

But they also give you the advantages of extremely high contrast and great resolving power plus a dependable uniformity which is the result of the technical skill and knowledge gained through a hundred years of experience.

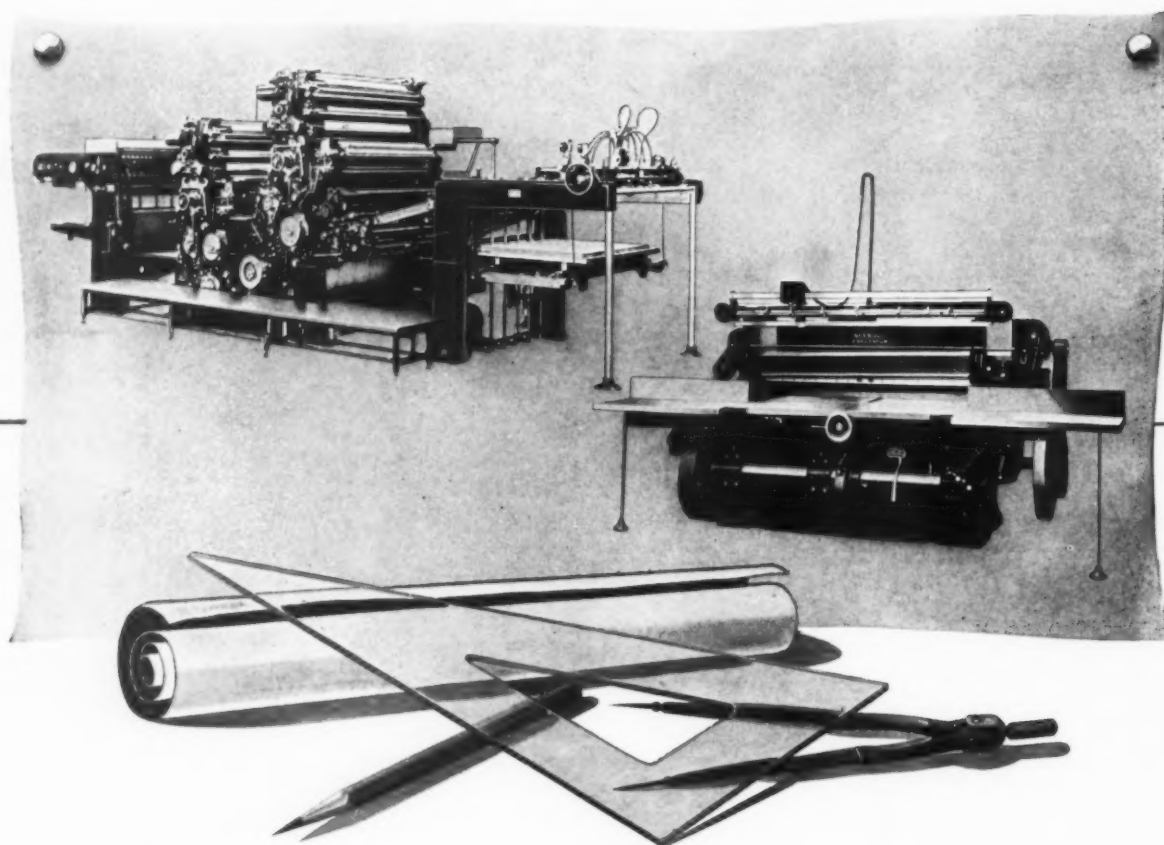
You cannot buy a better film for your work than Agfa Ansco Reprolith! Get some soon. It comes in Regular, Thin Base, Ortho and Pan types. *Graphic Film Division, Agfa Ansco, Binghamton, New York.*

100 YEARS OF SERVICE TO AMERICAN PHOTOGRAPHY



ENGINEERED BY THE SAME CODE OF

Precision Craftsmanship



The greatest advancement in the mechanics surrounding the printed word has taken place during the past twenty-five years. During this time our Engineering organization has established a continuous record of improvement, attaining finally in the production of both printing press and bindery equipment that realization of *precision* which is the highest honor in

craftsmanship and the greatest merit in performance. One code of constructive engineering thought governs all HARRIS-SEYBOLD-POTTER COMPANY products. Right now our entire production facilities are engaged in war work. But after victory we shall return stronger than ever to pick up the suspended task of regular service to the printers of America and of the world.

HARRIS • SEYBOLD • POTTER • COMPANY

HARRIS DIVISION

CLEVELAND, OHIO

MANUFACTURERS OF OFFSET LITHOGRAPHIC • LETTERPRESS
AND GRAVURE PRINTING MACHINERY

SEYBOLD DIVISION

DAYTON, OHIO

MANUFACTURERS OF PAPER CUTTERS AND TRIMMERS • KNIFE
GRINDERS • DIE PRESSES • WRIGHT DRILLS • MORRISON STITCHERS